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A

MANUAL

OF THE

PHYSIOLOGY OF MIND,

COMPREHENDING THE FIRST PRINCIPLES OF

PHYSICAL THEOLOGY.

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OF THE

PHYSIOLOGY OF MIND,

COMPREHENDING THE FIRST PRINCIPLES OF

PHYSICAL THEOLOGY:

WITH WHICH ARE LAID OUT THE

CRUCIAL OBJECTIONS TO THE REIDEIAN THEORY.

TO WHICH IS SUFFIXED A PAPER

ON THE LOGIC OF RELATION

CONSIDERED AS A

MACHINE FOR RATIONATIVE SCIENCE.

By JOHN FEARN, Esq.

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First Preface.

After the recognition which has been subscribed to in various quarters, regarding the validity of the principles which form the basis of the following little treatise, nothing appears to be more wanted, in order to adapt to popular apprehension some knowledge of the Science of Mind, than a Manual of its Initial Department, divested of all such disjunct matters as are usually, with a view to readers of a different class, mixed up with a delineation of the Subject, and which have been matter of frequent specific complaint, for having distracted the attention, and confused the understanding, of readers in ordinary.

Altogether beside other utility, and the demands of a liberal curiosity in every person of the most ordinary education, to acquire such an initial knowledge of the nature of Mind as is here contemplated; there is another motive to stimulate them, which cannot be regarded with indifference by any one within the sphere of its operation. The thing, to which I now allude, is the Evidence which the Physiology of Mind affords of the truth of Natural Religion,—a matter which, it may here be intimated, will be found in a very conclusive manner to characterise the Principles of the Science to be exhibited; and which indeed constitutes one of the principal objects of its publication in the present form.

In adverting to this object, it may be impressive upon the attention of readers in general to point out a collateral matter, which bears with a very remarkable coincidence upon the result of the principles in question. The thing now suggested is the fact, sufficiently known to all those who are conversant on Asiatic literature, that a Sublime Theological Creed has, during an unknown number of ages, prevailed over the Regions of India; the tenor of which is, that ALL MIND IS HOMOGENEOUS,—*and* ALL BODY IS MIND. And what gives great weight to the claims of this Creed, is the certainty that it was that of an enlightened race of men, who had attained at least a very high pitch of Rationative Science.

While, however, we are upon the one hand possessed of the knowledge that such a Creed existed, *and still exists;* it is to be observed, upon the other, that the Philosophers of Europe have been altogether prevented from rendering the matter in question in the least degree *available,* owing to a total want of knowledge of the *rationale* of the process by which its Founders were conducted to that Tenet,—the *mere fact, of the early existence* of which, is the *sole light* on the subject that has penetrated the gloom of ages, and shed its ray upon the present time. From a *want of the connecting links,* which were necessary to *substantiate* the *conclusion by an exhibition of premises which alone could support it,* the Hindoo Tenet, since it broke in upon the cognisance of the Metaphysicians of these and Adjacent Countries, has

unavoidably been viewed by them as being no other than a MERE CURIOSITY, void of all philosophical value or interest, because utterly incapable of any *applicability* for the solution of the great problem involved. The thing has, on every hand, been quoted, and wondered at, and laid aside, like any unmeaning idol, or relique, of Oriental imagination, without engendering any thought of respect, in the minds of those who have afforded it a momentary contemplation, any more than has been accorded to those storied and disbelieved Incarnations of the Deity which are embodied in the same tradition. What, then, will follow, now that it has become matter of proof, that the Founders of the Hindoo Theology certainly MAY have had, *and in great probability actually possessed*, demonstrative evidence of the truths upon which their great conclusion rested? Such, at any rate, is a fact comprised in the Principles stated in the following Manual; and that have at least received an extent of recognition from contemporaries, to warrant the confidence with which they are here exhibited, as a department of science.

It is known that, collaterally with the Theological Creed above alluded to, there has also obtained, over a very large proportion of the Regions of Asia, an ATHEISTICAL Belief, founded on the supposed Nature and Powers of Matter,—a Sort of Philosophy the practical result of which has been that of plunging perhaps nearly a fourth part of the Human Species into the depths of an extreme demoralisation. And it is matter of difficulty, if

indeed it be at all possible, to determine which of the two Schemes in question had the priority of existence. But the darkness which exists on this question can take nothing from the *reality of the main facts*—namely—that *both have existed, and do still exist*. And these facts perhaps only afford us the edifying lesson, that mankind have heretofore fluctuated, and will continue to do so, between Polytheism and Atheism, according to the *direction and degree of their* NATURAL KNOWLEDGE: While it is only in a very rare state of *unaided* human speculation that they would ever cast to the side of a Pure Theism.

The state of opinion of the Philosophers of Europe during the last hundred years, including the opinion of all such persons as have been devoted to pursuits connected with Natural Science, affords a confirmation of the effect of that cause to which I have just attributed the past and present state of Religion in Asia. And, I confess, I suppose the thing to be little short of certainty in the tendency of the human mind, in the situations described. The lowest degree of knowledge of the operations of nature leads the Savage to discern a God in every Natural Agent; and the Barbarian to people the air with Chimerical Intelligent Beings. A high attainment in the knowledge of Nature, or of the Arts, such as that possessed immemorially by the Natives of India, China, and Japan, leads the practical adept to conclude that a BLIND BRUTE NATURE IS THE ONLY GOD. While the habits of a calm and intense abstraction, alto-

gether unbusied in the practical arts, seem to have conducted the Intellect of the Hindoo Theologist to the proofs that there is No Nature in the Universe, *but the* Essence, *the* Energies, *and the* Volitions, *of a* Great Intelligent Being, acting upon Finite Intelligences which it envelops.

It would follow, from this view of the subject, that a very deep immersion or absorption in the Natural Sciences, or the Arts, *unless counteracted by some favourable circumstance, has a strong tendency* to draw the Human Understanding to the side of *Natural Infidelity*. But it by no means follows that the votaries of such pursuits should *actually determine* that way, providing they prosecute their labors with circumspect and enlightened views of the Subject, *in all its possible phases*:— And a contrary result may be fully anticipated, when the evidences which bear most momentously on the question shall attract the general notice of the classes in question. The great desideratum on the Subject, at the present moment, is only to accomplish the point of its acquiring that general notice, which the past neglect of it has rendered unavailing to public opinion, and, perhaps, the most so in the case of those who are habitually immersed in the departments of knowledge above mentioned.

In such a state of public opinion on the Subject, as that which now exists, it should seem that the manifest rationative connection, between the Principles laid down in the following Manual and the Hindoo Theology, is too striking to require

any commentary in order to secure to it a due share of attention. And to many persons, indeed, it might seem that the one had been adapted with premeditation to conform to the other, were not the circumstances of their evolution, as well as the nature of the principles themselves, such as altogether to preclude such a conjecture.

To those Readers who are not of any of the classes which lead them to be aware of the accordance which MUST subsist between all True Religion and Sound Philosophy, the following principles can be of no value in a *religious* point of view: Nor is the statement of them at all intended to disturb their opinion.

It remains, here, only to say, that the small volume now presented to my contemporaries; and which, certainly, embraces considerable, and some original, farther matter than a mere statement of the principles above alluded to; has received more of my attention, in order to render it what it ought to be, than might be expected from the extent of its letter press; the intention, indeed, having been that it should not, in the main, require my future revision. To most readers, I would commend attention to the Section of our THINKING IN COLORS;—it being the statement of a general fact of the Mind, never, I think, before suggested; and which may, more than any other, lead readers to a relish, as well as a knowledge, of the subject.

Second Preface.

The present state of Pneumatological Science in Britain may be judged from the fact, that, at a very recent meeting of the Proprietors of the newly-instituted University of London, it was officially announced that no Candidate for the Chair of the Philosophy of the Mind had appeared, who was deemed eligible to fill that situation.

It is not to be dissembled that such a fact exhibits a spectacle peculiarly humiliating to the philosophical character of these Countries; and must fill with concern and anxiety every person who entertains any hope of beholding the Science of Mind raised, from that state of degradation to which it has long since sunk in the public opinion. In such case, certainly, nothing is more to be desired, by those who have the interest of the subject at heart, than that the choice of an individual to fill the office in question should be fortunate. As affecting my own particular case, I confess, there is no person concerned in the event who can feel more interest in it than myself: For, although I have more than once,—(and it is, for various reasons, proper for me to intimate the fact,)—expressly declined the suggestion of friends, that I should lay myself out for the thing;—a step which, even if I had yielded to it from a desire of being useful, might have subjected my eligibility to the contingency either of favor or denial, and,

at best, my ease to much additional sacrifice; it is manifest that the readiest means of bringing my views into general utility, would be their promulgation from the chair of a Professor in some Collegiate Institution. Urged by these considerations; I deem it incumbent on me to afford the following statement of professorial precedent, in the Science of Mind; especially, since it can hardly be expected that the future will present a fortunate contrast to the past, unless such amendment shall be induced by a due appreciation of the facts involved.

In the Notes, at the end of the Third Volume of his Elements of the Philosophy of the Mind, the late Professor Stewart has expressed some pointed strictures on the philosophical calibre and proceeding of Professor Brown, who succeeded him in the University of Edinburgh: in which, after ascribing to him, generally, only a superficial genius and hasty views of his subject, Mr. Stewart, as furnishing a single example of the truth of his assertion, cites the particular instance of Dr. Brown's having employed the words *Will* and *Desire* as synonymous terms; and then adverts to the circumstance of his having afforded to the latter a delicate hint of his mistake; with regard to which caution Professor Stewart farther says—"I must "own it was with some regret that, in the third "edition of his *Cause and Effect*, published as late "as the year 1818, I found him not only perseve- "ring in the same mistake, but employing many "pages of discussion in retorting on those philo-

" sophers by whom the distinction had been " made."

Now it is to be presumed, that no sound philosopher will deny that Mr. Stewart was right, on the ground he had thus asserted. But it is principally important here to mark what he has added, in his strictures on the case. He goes on to say that—" The account given of Dr. Brown's posthumous " works by his ingenious biographer bears ample " testimony to the truth of some of these remarks." And he then quotes the following passages, from the Rev. Mr. Welche's life of Dr. Brown.—' It ' gives *an additional value to the printed lectures* to ' know that nearly the whole of the lectures that ' are contained in the first three volumes were ' written during the first year of his professorship, ' and the whole of the remaining lectures the year ' following.' . . . . . ' As he continued to read the ' same lectures till the time of his death, they ' were printed from his manuscripts exactly as he ' wrote them.' . . . . . ' The subjects of many of his ' lectures he had never reflected on till he took up ' the pen; and many of his theories occurred to ' him during the period of composition.'

Upon marking the tenor of these quotations, given by Mr. Stewart in a spirit which is certainly congenial with my own opinion, it may with confidence be affirmed that either Professor Brown was gifted as no other man ever was; or, there must be a large mass of visionary matter mixed up in his various theories and speculations. And having said this, and considering what is here at stake, I

should culpably betray a cause in which I have sacrificed more of time, and of life, than any individual in these Countries now that Professor Stewart is no more, were I not to express my conviction that never did Four Volumes on the Subject more extensively bear the stamp of their Origin than the Lectures of Professor Brown: Although I cannot yield to this avowal, without at the same time adding my high opinion of the amiableness of his character. In justification of an opinion for which I should always hold myself bound to answer, I can on the present occasion only allow room for a mention of the fact, that Dr. Brown has *argued at large to derive our notion of* SPACE OR EXTENSION *from our notion of* TIME. And, having adverted to this fact, I trust I need add nothing to strike every philosophic mind with the magnitude of its absurdity: which, however, is certainly not greater than the ruin it would inflict on the human understanding. With regard to the Lectures in question; *whatever could* have been their complexion, I cannot do other than join Professor Stewart in expressing my surprise, that the Biographer of Dr. Brown should have deemed the circumstances of their origin a subject of *eulogium*, as he manifestly did.

But, after our being so signally instructed by the case of Professor Brown; let us now turn to contemplate that of Professor Stewart, which is no less instructive, or important to the fate of Philosophy in Britain. At the very moment he was expressing those strictures on the procedure of Dr.

Brown, Mr. Stewart himself was laboring under the pointed condemnation of his friend Dr. Parr, and of Public Criticism, for a conduct of the very same nature, and far more aggravated in degree,—namely—a pertinacious, and I must say a despotic, refusal to listen to the remonstrances either of criticism or of friends, that he should revise the tenor of *his own* theories; or, in any way advert~~ing~~ to the advances made by me in the subject, especially in the laws of Sensation and Perception: In which proceeding, be it observed, I do not here include the additional step of his endeavor to deny to me the priority in that scientific matter which has been a subject of controversy between us.

With such precedents as these in our view; the following considerations can hardly fail to strike every person with sufficient force. In any of those Sciences which, from their bearing *obviously* upon the arts that conduce to utility, to luxury, or to profit, excite a lively interest in the public mind, no Professor elect in any Public Institution will hazard the promulgation of any obsolete or visionary doctrines: nor will any such ever affect ignorance of any notable advances made by his contemporaries, in his own department of knowledge. And were any such Professor to transgress, in either of these points, there can be no doubt as to his future reputation, and fate. But when we turn from those Sciences, to the case of the *Philosophy of the Mind;* if a Professor elect, in any British University, were to set out with exhibiting the most fallacious System on the Sub-

ject; and, having so done, were to continue the same course, whilst any advances, even if they were the most important, were made by any other person in the same branch; Who is there to check him in this procedure; and to rescue the rising generation from such a delusion? Or, it is to be feared we might yet, with too much justice, put a farther question—namely—Unless we may except a few who would not interfere, Who is there among us who is competent to disabuse a Nation, by opening its eyes to the fact that it is thus abused?

If these questions cannot be answered in a manner that is in the least degree either satisfactory or consoling; it may be hoped that a large part of the community, and especially that illustrious body which has founded a Metropolitan University, may be impressed by a consideration so deeply affecting our National Institutions for collegiate education.

It is indeed to be hoped, that the caution manifested by the Council of the University of London, in their recent proceeding upon the subject, is the augury of a fortunate result in their choice, whenever it shall take place. And while I freely acknowledge an interest, and this a very deep one, in the result; the fact is unimpeachable that this interest is of no other nature than a desire that whoever may be the individual chosen, for any such office, may be a person open to the admission and promulgation of truth on the subject.

Third Preface.

The Reideian Philosophy, which, from its singular complexion, from the period of its promulgation, and from the literary distinction which has attended the writings of its founders, has amounted in point of fact to a notable era in the History of the Human Mind, has been marked, at its origin and its termination, by two of the most extraordinary examples of philosophical conversion that were ever exhibited to the notice of mankind: The conversion of Dr. Reid, from the visionary Idealism of Berkeley to the setting up of his own Scheme, had never a parallel of inconstancy in the history of speculative science, except in the conversion of Professor Stewart, near the close of his life, from the Theory of Reid to the Sound Philosophical Idealism of Locke. And though neither of these events bears at all upon Philosophy itself; yet, considered with regard to the effect which they cannot fail to have in influencing opinion, at least in these Countries in which the writings of the Reideian School have long enjoyed much literary respect, it becomes a matter of indispensable moment that a statement should, on the present occasion, be given of the *fact*, and the *manner*, of each of the conversions in question. Accordingly, therefore, a brief statement of the documentary history of the change of Mr. Stewart

will form an Appendix to the following Manual: And, in the course of the volume itself, an account of that of Dr. Reid will constitute an appropriate article. In noticing these considerations, nothing could be matter of greater satisfaction, for the advancement of the subject at stake, than the fact that the particulars are of such a nature as to preclude the possibility of any attempt to elude either the fact or its consequences, were ingenuity set on work to effect such a purpose; which, of course, it would be natural, and laudable, in any biographer, or friend, of Professor Stewart fairly to attempt, for the philosophical reputation of the deceased.

As I shall have occasion to advert very repeatedly, in the course of the following treatise, to the fact of the conversion of Professor Stewart, on account of the RE-UNION which this event must materially tend to produce in the opinions of English readers, and doubtless also in readers on the Continent; and as there is not room, in the prefatory part of the volume, to enter at all upon the details of the fact; I would suggest, to such readers as are not already acquainted with the matter, to peruse the appendix previously to their entering upon the body of the work. Having afforded this intimation, I shall, as occasion demands, refer to the matter, in the course of reasoning, the same as if it had been stated here in the preface. And I have made even this brief allusion to the thing the subject of a Third distinct Preface, in order to mark the importance which I conceive

is to be attached to it, for its bearing upon philosophical opinion.

It cannot be misunderstood, or supposed that I impute blame to Professor Stewart for his conversion. On the contrary, I ascribe this step to him as being the best thing he ever did to give, or rather to *restore*, Philosophy to his Countrymen. That he did this under pressure of circumstances, and thus acceded to a truth which he never would otherwise have seen in the same light, is a matter which I shall leave to all to decide upon after perusing the documentary evidence. But no one will pretend that he did this in a state of imbecility; or, that his eyes were not completely open to the truth which he was thus drawn to discern. The voice of impartial criticism has spoken sufficiently to the issue, to leave me nothing to wish but that general benefit to the science in question which must follow upon the promulgation of the fact. And if my application to the Subject had been followed by no other fruit, I should look back with much gratification upon the solitary service of having been the means of bringing about the event which is here the object of remark.

Torrington Square, London,
March 30th, 1829.

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A

MANUAL,

&c. &c.

SECTION FIRST.

OF THE PHYSIOLOGY OF THE HUMAN MIND.

DEFINITIONS, FIRST PRINCIPLES, AND RATIONATED LAWS.

Definitions.

1.—The word MIND can hardly require any definition to an English reader: When referred to ourselves, it means that, within our organic frame, which loves, and hates, and hopes, and fears,—the Thing we call *I*, or *Self*, recognised alike by the Philosopher and the Vulgar, as our Conscious Subject, or that which thinks.

2.—THE PHYSIOLOGY OF THE MIND is a Science, which teaches us the nature of our own and of other minds, considered as SUBSTANTIVE BEINGS *carrying on a* PHYSICAL *correspondence* with other Substantive Beings around us, by *first* teaching us the *Physical Properties of our own Thoughts*, including their correlativeness to one another during their co-existence in the mind at any time, and in their succession. The Physiology of the Mind may otherwise in this Treatise, for the sake of

convenience, be called PNEUMATOLOGY; although Pneumatology properly comprehends, together with the former, all the other departments of human thought, such as those of Memory, Imagination, the Passions, Desires, and Will; all which are *beyond* physiological consideration in the present state of our knowledge; which departments distinguish the last mentioned science from the first, as a whole from its part.

In other words, and to lay down clearly to the imagination the limit of the present initiatory Treatise; which, though it points to some farther objects, is in the first instance intended principally as a Primer, for such as are not too old to begin, or too edified to rebuild, their knowledge of the subject; the Department here to be delineated is, to the Whole Philosophy of the Mind, what a Basement Story, including its foundation, is to a House,—a simile which is so accurately true, that, while the present Department does *not run into or blend* with those from which it has been distinguished above, the Sciences, even, of Mathematics and Logic have their foundation in it.

3.—The Physiology of the Mind is founded in the Laws of our Exterior Sensations; namely—of those which we undergo in consequence of an operation of any of the five external organs of sense, called Touch, Taste, Smell, Hearing, and Sight.

4.—SENSATIONS *are a Species of* THOUGHT: And *every Thought* is a MODIFICATION OF THE MIND. This Proposition forms the very first Principle in

Pneumatological Science; and it rests on the universal consent of Pneumatologists. It is the common foundation and starting-post of all philosophers of mind: and is the *Fulcrum*, upon which all their Structures must be supported.

A MODIFICATION of any Thing, *and therefore of the Mind*, is A CHANGE OF STATE *in that Thing*. Thus, If a bar of Iron be heated, cooled, bent, straitened, twisted, tied in a knot, impressed, rounded, squared, or flattened, &c., it is thereby MODIFIED: but, if a continuity of parts be essential to this bar, and if the bar be broken asunder, or the continuity of its parts be interrupted, the bar is thereby *not modified*, but it is *destructed*, that is *destroyed*. And if the bar in question had a different sensation, i. e. thought, along with every one of the above-mentioned physical modifications; then, every such *Sensation* would be a *Modification* of the bar, although a modification of a vastly different kind from that of bending, twisting, &c.

The First Principle, by universal consent, that *Every Thought is a Modification of the Mind, and must always be so considered*;—which Principle is contradistinguished from every Scheme of *Detached Ideas*;—is upon the whole the most precious in the subject: because, *without this unanimity*, there would not be wanting extravagant Spirits, occasionally springing up to disturb the Subject, as has happened heretofore.

5.—EXTERIOR Sensations are those Modifications which the Mind undergoes from the action of External Objects when we first awake from sleep,

and which are continually varying, and giving place to others of the same species, until sleep again return. These Modifications arise occasionally in sleep also, in the state called dreaming. And, in the important Sense of Sight, we can otherwise excite them, during vigilance, by looking at lucid objects and then closing the eyes ; and, still more remarkably, by any continued pressure upon the closed eye, in the same manner that we can by pressure excite Sensations of Hearing, and of Touch. It is known, also, that Sensations of Taste may be produced without the application of any sapid body.

That action, or cessation of action, of our nervous system called Sleep, produces ONE of the Modifications of our Mind, by producing a *Change of State* from thinking to a voidance of thought.

The term EXTERIOR, as put to designate the Sensations in question, has a propriety, (as will be seen hereafter,) altogether independent of any consideration of their being occasioned by external objects,—a propriety in the *constitution of the Mind itself.*

6. Of the Five different species of Sensation, occasioned by the five external organs, those of *Touch* and of *Sight,* alone, are adapted to the purpose of demonstrating the Physiological Conditions of the Mind : although an analogy to these may be faintly traced in the Sensations of the three other Senses, and especially in those of Taste. In this dispensation of Providence, we, in all probability, discern the operation of a *Final Cause:* because there would appear to be no utility, of any moment, in

having our sensations of *Smell*, or of *Hearing*, and very little in having those of *Taste*, so modified as to manifest to us any physiological property, such as their *interlimitations between each other* when several of them are present at once: and, were it otherwise, there seems to be no reason why the Nerves might not have been so ordered as to produce this effect.

7.—The Two Species of Exterior Sensation which form the adapted subjects for demonstrating the Physiology of the Mind, namely, those of TOUCH and of COLOR, are so far analogous in their phenomena, that the *same General Laws* regulate both the one and the other. But, on the other hand, they differ in this respect, that, our Sensations of Colors are far more fitted, than those of Touch, for the purposes of demonstration. As, for example, a *proper* line of interlimitation between two Colors is PERCEPTIBLY *void of breadth*, as its demonstration also mathematically proves it is: but the external corporeal mechanism of the Sense of Touch is not sufficiently exquisite to make a *breadthless line* an object of PERCEPTION by that Sense, as may be proved if we attempt to *feel* any line which exists externally between two pieces of cabinet-work closely joined together. It follows, therefore, that Sensations of COLOR, ALONE, can be employed, as being the *adequate* subjects of the Physiology of the Mind: Although it is important always to hold in view, that the *Laws of Color* (to be stated presently) are in fact the *Laws of Touch also*, if we choose so to employ them; and that,

the same would hold good in the Sensations of Taste, Smell, and Sound, if the nerves of those Senses distributed their impressions; as in the Sense of Taste they do, very perceptibly.

8.—SENSATIONS have occasionally, that is in certain circumstances, another name in being called IDEAS: but these two names are not universally convertible. Thus, when we employ the *generic* term *Idealist*, *Idealism*, or, the *Ideal Theory*, this term comprehends *Sensations* under the name of *Ideas*, and considers the Former as being One Species of the Latter. But when we are speaking of *Sensations*, and of *Ideas* of Sensation, the latter term imports a *remembrance, or else an imagination*, of a Sensation, such as that which we have, when we shut our eyes after looking at snow, and call an *Idea of white;* or, that which we sustain when we think of a *green dragon*, which includes an *Idea of Green*.

It may be held with certainty that our *Ideas* of Sensation are no other than *Very faint Sensations*. These, therefore, when they arise in dreams, impose upon us by seeming more vivid than they would in the presence of Vigilant Sensations. At the same time, however, we often have real full Sensations in our dreams: which last combine mysteriously, and with wonderful adaptation, with Ideas that accompany them: and thus, the whole company together make up the dream.

9.—The word NOTION has been employed, by some late Writers, *synonymously* with the word IDEA,—a device set up by the Reideian School,

(which School denies any physiological property to any of our Thoughts) in order to *confound* a distinction of the older Pneumatologists, who supposed our Exterior Thoughts to have physiological properties, and our Interior Thoughts as not having such properties; the former of which they therefore called *Ideas*, but the latter they distinguished by the term *Notion*. The *synonyme* in question is admitted in this Treatise, and in my previous writings: but this for a reason the *very opposite* to that of the Reideian School, namely,—that, after our *Exterior* Thoughts are demonstrated to have physiological properties, it becomes a rational conjecture, in the way of analogy and not unnecessarily to multiply causes, that our *Interior Thoughts*, also, have some modification of the like, although we cannot trace their anatomy. The synonyme, now adverted to, is otherwise useful or convenient, in order sometimes to vary the name of Idea, in the case of frequent repetition.

It may be proper to intimate here, although this fact must wait upon its proof hereafter, that the *conjecture* above-mentioned is turned into an *inference* in the case of *one most important point:* for it can be demonstrated, by evidence no less than disciplinal, that the JUDGING FACULTY in the Mind possesses a position of LOCAL INTERNEITY therein, considered with respect to our Exterior Sensations. This fact is matter of science, strictly speaking; and it yields not, in evidence, to any principle of Science, either within or without the Mind.

The whole of this article, however, with ex-

ception of the adoption of the synonyme, is to be regarded as being put after what follows.

Having defined those terms, to be employed in this Treatise, which appeared to require it; and laid down the First Principles, by universal consent, which form the DATA of the reasonings to be stated with regard to them; we may now proceed to exhibit the *Rationated Laws* of the Physiology of our Exterior Sensations, in the Sense of Sight. These Laws, which have been treated on former occasions under the name of the *Laws of Primary Vision*, are few and self-evident: And they possess the two-fold character of being, at once, *Laws of Nature* and *Mathematical or Necessary Truths*,—thus evincing a union of two natures, which have not heretofore been recognised in Philosophy as being compatible. The reader is, for the sake of expedience, required to note the two-fold character in question, in these Laws, as he proceeds.

These Laws of Vision are called *Primary, and also Rationated*, in order to distinguish them from the Principles of *Secondary* Vision; for which last we are indebted to the genius of Bishop Berkeley: which are *not Laws of our Sensations at all*, but are Principles of the Visual Perception of *External* Objects; which Principles are *not Rationated*, but are *merely Inductive and Empirical*, and only enable us to *guess* the Distances, Magnitudes. and Trine Figures, of Bodies that are *without* us. The two Subjects have no connection with one another; but differ as widely as Mathematics and Scene

Painting: which it was proper to explain, in order to prevent any confusion of the subjects in the imagination of a reader.

The Rationated Laws of Vision.

First Law:—Unformative.

No unvaried sensation of color can ever be accompanied by a perception of any visible figure, any line, or any point.

An example and proof of this Law is had when we look at the *unicolored unclouded sky;* at which time we have no perception of any figure, any line, or any point.

Second Law:—Formative.

When any two different and unsoftened, i. e. unblended, sensations of colors, such as a Blue *and a* Yellow, *are felt at the same time; they* must meet, *and their* meeting *must be that* perceived line of contiguity and contrast *which we call a* Visible Line.

An example and proof of this Law is had when we look at the sky and the sea together; or, at the sky and the roof-edge of a house; where they appear to join: For, in this case, we have two sensations of colors; and the *meeting and limitation* of one color by the other is a *perceived line* between them. And thus, a Visible Line is nothing in the world but a *line of meeting* between two of

our own sensations of colors: or, in other words, a Visible Line is the *termination* of one Sensation of Color by another, in the Mind.

THIRD LAW:—FORMATIVE.

When any two different and unblended sensations of colors are felt at the same time, and are so disposed, in relation to each other, that ONE *of them* SURROUNDS *or* EMBRACES *the* OTHER; *their common line of contiguity* MUST RETURN INTO ITSELF *and so enclose a space, and by so doing it must form what is called a* SUPERFICIAL FIGURE, such as a circle, a square, a triangle, or some other and more irregular shape.

An example and proof of this Law is had when we look at the *White Moon,* SURROUNDED *by the Blue Sky:* For, in this case, the *line of meeting,* between the White and the Blue, *returns into itself,* and so forms a *circular figure.*

And here it is manifest, that the *Third* Law is only a *Different Case* of the *Second.*

FOURTH LAW:—UNFORMATIVE.

When any two different sensations of colors are felt at the same time, but are so softened, at their nearest edges, as that they BLEND INTO *each other and thus leave* NO SENSIBLE CONTRAST *where they meet; they never can be accompanied by a perception of any figure, any line, or any point, not even if their* REMOTE PARTS *should be of the most opposite colors, or black and white.*

A proof of this Law is had when we look at

either the *dawning, or the decline, of day:* For, in this case, we have two sensations of colors, which are so different at the *parts or portions farthest from one another* as to be, *the One either ruddy or gray*, and the *Other black, or nearly so;* WHILE, *where they approach* each other, they *blend into one* and present to our perception *no contrast*, or in other words *no line*, between them. And thus, by this Fourth Law, it is confirmed that a PERCEIVED LINE is nothing but a PERCEIVED CONTRAST between two of our own Sensations.

In the present statement of these Laws of Vision it may be discerned, by those who have seen the former statements of them, that I have avoided the introduction of the word RELATION. This has been done in the present case, inasmuch as the word Relation, as every where employed by me, carries a vastly different import from that heretofore uniformly assigned to it by Logicians. It is known to those who have read the Analysis of Relation, that, according to it, the terms *Relation* and *Relative* are NOT *synonymous*, as they are in the Accredited Scheme of the subject: On the contrary, a *Relative* means a *Related Subject* LINKED TO *Another Related Subject*, by the MEDIUM OF A THIRD THING OR LOGICAL BRIDGE, which THIRD THING, as it must have *some* distinctive name, I have called a RELATION. Thus, for example, a *Sensation of Blue*, and a *Sensation of Yellow*, coming together in the Mind, are *Two Correlated Subjects;* and the *perceived line of meeting*,

which they *create* by their co-existence, is a *Third Thing*—that is a *Relation*—between them; which Third Thing is a *Link or Bridge of Logical Connection* between the Two Co-existent Colors, at the same time that it is a *Logical and a Real Partition and Barrier* between them.

From the exposition, now given, it will be seen that an uninitiated reader may best understand the Laws of Vision, in the first instance, from their being laid down without the use of the word Relation. But, in order to apprehend the subject duly, it is manifestly of the last importance to understand that the PERCEIVING A LINE is nothing in the world but an ACT OF OUR JUDGING FACULTY, performed upon Two of our own Sensations: It is an ACT OF OUR INTUITIVELY JUDGING WHERE *Blue* MEETS *Yellow*, which is the same as WHERE *Yellow* MEETS *Blue;* which meeting, therefore, can be *neither* BLUE *nor* YELLOW, and hence must be without any color, that is *breadthless*, by being a *privation of all color*. In a word; the *perceiving a visible line*, and the *conceiving a mathematical line*, is ONE SAME SPECIFIC ACT OF OUR JUDGMENT, performed upon *Two Correlated Surfaces:* And the Definition of a Visible Line is the Definition of a Mathematical Line.

It will open a new view of the subject, although it is not necessary here, to point out that a LINE *is an* ACTION. Thus, a *Line* is a *Meeting* between two Colors; and a *Meeting* is a *Touching;* and every body knows that *touching* is an *action:* Nor is it different if we call it *contacting* or *contrasting;*

for the last is as much an action, in a *logical* sense, as if we had said *striking*.—Who would have supposed that *all the Figures of Objects*, which he perceives, are ACTIONS between *Those Objects* and *Other Objects* that appear contiguous to them? Such, however, are the truths to which a sound rational Logic must conduct us.

The conceived necessity for recognising the Principles of Relation, now adverted to, in the case of Philosophical Speculation or Science in GENERAL, is the principal object of the "Paper on Relation" which is suffixed to the present treatise. And it will therein be shown that, in none is it more essential, or indispensable, than in the Philosophy of the Mind.

The FIRST consideration here, after laying down the Four Laws of our Visual Interlimitations as above stated, is to insist upon their *nature:* Concerning which it must be self-evident, to every reader who possesses the smallest tincture of mathematical knowledge, that they are *Necessary* Laws, at the same time that they are also *Laws of Nature:* The meaning of which is that, though it can be *only a contingent fact* when any of our Sensations of Colors exist, yet, *when they do exist*, it becomes a Necessary result that they *must create those Interlimitations*, between themselves, which we perceive and call *Visible Lines*. In this character, therefore, the Laws of Vision are *Mathematical Principles*, absolutely and beyond a cavil: For, in like manner, no equality between two mathematical triangles can be *actually true* unless the two trian-

gles serving as the subjects of the demonstration *actually exist;* and, if any such can exist in external objects, or even in our Sensations, this fact must be a *mere contingency.*

The NEXT consideration is, with regard to the *Pneumatological Consequence* of these Laws of the Interlimitation of our Sensations. In order to arrive at this, it is an initial step in the subject that a reader should make it *familiar to his contemplation* that COLORS, that is those beautiful illumined thoughts—those Modifications of his mind—called *White, Red, Blue, Yellow, &c.* are NOT *skins* or *coverings adhering to the outsides of External Bodies,* as all men, except philosophers in the moment of philosophising, believe them to be. It is this HABIT, rather than a momentary initiation into the fact, that alone constitutes the KEY which unlocks the Physiology of the Mind; and the want of which renders ordinary persons averse from the subject, because they cannot relish what they do not understand. With regard to this, there is a strange degree of reluctance, in most persons, to look at the subject with any desire to apprehend it: although it is certain that even a few minutes of attention is sufficient to introduce them, as it were, to a new world, that is to a knowledge that the world which they believed to be external to them, *is in reality in their own Mind, and formed of the Modifications of that Mind* itself: while there is also a world without, and unperceived by them; which is the physical cause of exciting what they do perceive. (See note A.)

The experiments for proving this fact are within the reach of every person; and this with the greatest ease and convenience. They are endless, in their variety: but the following may be mentioned here. —*First.* Looking at any lucid object; and, then, closing the eyes.—*Secondly.* Contemplating the objects seen in dreams; when we are certain that no external objects, like themselves, exist.—*Thirdly,* and above all, Commencing and encreasing a pressure of the hand upon the closed eye: In which case, we begin to perceive a *surface covered with minute undulations of color,* of a bluish, or grayish cast; and, as the pressure increases, we perceive *bright mottled yellow waves,* which not only have *sizes, and shapes,* caused by *their own Interlimitations between themselves,* but their sizes and shapes are continually varying, until at length the sense of physical glory is equal to that we have when we look at the sun's disk on a clear day. From this last experiment, then, it is in the highest degree manifest, our Sensations of Colors are, in a certain physical sense, what Hobbes has said of Laughter, in an intellectual,—namely— a "*Glory*" arising in the Mind, upon certain occasions: And every one of them, of every hue and tint, is a *Physical Illumination* or *Picture* in the Mind, in the place where it appears; although, by the word Illumination, I do not here mean *Light,* in the sense of the Natural Philosopher, because Light is an *External* thing and is *never perceived* by us. There is not, indeed, a fact in science which stands upon higher evidence, than that ELEMENTARY *Sen-*

sations of Colors are UNDULATIONS *upon the Surface of the Mind,*—a fact proved as well in being a deduction from the Rationated Laws of Vision, as in the inductive experiment last described.

After what has been laid down, it may be of service here to explain *in what manner we are deceived,* when we think that our Sensations of Colors are coverings adhering to the outsides of external bodies. Let us, then, suppose we are looking at *what we call a White House:* In this case, we are as much deceived, and deceived in a similar manner, in believing that the Sensation we have of *White* is a covering adhering to the *House which we call White,* as we are when we believe that *this House* TOUCHES OR ADHERES TO *Another House which is some distance beyond* it, but which to our apprehension it *appears to touch.* The real fact is that the Sensation of White, in our Mind, *forms a painted or illumined skreen,* which *stands between* us and the House we call White, and renders it *impossible* to perceive this House, as completely as it is impossible for us to perceive that part of the House beyond that is shut in behind the one first mentioned. This illustration is not only scientific truth in itself; but it is one which brings the subject within the apprehension of the most ordinary capacity. It will be enlarged upon when we come to treat of our thinking in colors: when the Physiological Condition of the Mind will be delineated to popular conception.

To return, now, to the *Pneumatological Consequence* deduced from the Laws of the Interlimita-

tions of our Sensations of Colors; Our Sensations being universally admitted to be Modifications of our Mind, it is no less than an identical proposition to say that our *Sensations* are extended and figured, and to say that the *Mind*, of which these are Modifications, is extended and figured. These, (I say,) are *not two* propositions, one deduced from the other; but they are *one same* proposition exhibited in two equivalent expressions. And since this proposition has been demonstrated by mathematical evidence, as being no other than a disciplinal proposition of that Science, it becomes a truth with which no fact in Natural Philosophy can compete; but to which, it is sufficient to say, none can be superior; that the MIND *is an* EXTENDED SUBJECT, *like any external body*.

The important conclusion, now stated, being that which brings us to the first period of the Physiology of the Mind, we shall close the present section with the following historical commentary.

Brief Historical Minute of the Absurdity of Theorists, involved by their assumption, (avowed, or tacit,) of the Mind's Simplicity.

The Laws of Vision introduce *no new ground of Pneumatology:* They only demonstrate the truth of the Idealism of Locke; whose proof he had left as a Desideratum, and which was necessary to prevent any *supposeable* opening for such a Scheme as the Reidcian Theory. Without such proof, indeed,

Locke never for a moment doubted that our Exterior sensations, (and, of course, the Mind of which he knew they are Modifications,) are extended: But the fact rested upon proofs which, however well grounded, *did not* prevent the Scheme of Reid from being broached; nor did it do this, although Mr. Hume, with all his philosophical acumen, at the same time, and upon the ground asserted by Locke, affirmed, without a suspicion that he could be contradicted, that "if the mind exists at all, it is extended."

Philosophical Superstition, which can work a real miracle on the human understanding in making it subvert its own first principles, has in all ages led Philosophers to draw a different conclusion from that of the Mind's extension,—a conclusion grounded upon *two*, and *only two*, SUPPOSITIONS; for they are *certainly no better*. ONE of these, is the *Supposed Simplicity of the Mind*, as being deemed necessary for what is called the *Unity of Consciousness:* The OTHER, the *Same Supposed Simplicity*, as being thought necessary to *prevent the destructibility* of the Mind by a *discerption of parts*, like that which happens to the parts of Bodies: All which while it is undeniable that the line of human reason is too short, to afford us *the least ground of knowledge*, as to WHAT IS necessary to insure these two perfections to the Mind; and, most certain that men do but deplorably grope in the dark, upon the Subject. This doctrine of the Simplicity of the Mind, therefore, is a MERE PHILOSOPHICAL SUPERSTITION; AND NO OTHER. And, accord-

ingly, it is most edifying to contemplate the VARIETY OF FRUITS which this superstition has produced, when sown in the soil of *different minds, variously circumstanced:* the bare comparison, or contrast rather, of which, ought to prove a sufficient antidote to the poison of the hypothesis.

For, from this dogma we have, *first,* the Ancient assumption of *Two Souls,* a *corporeal extended soul,* and an *incorporeal unextended one.* And, next, M. Des Cartes, turning his Ideas, (which he *knew and recognised to be extended,*) out of his *assumed unextended Mind,* into his *Brain,* because he well discerned that extended ideas could not find lodgment at home. And, then, Father Malbranche, who, with the same design of asserting a simple mind, denied to the mind ideas at all; and, in his assumption, made us perceive the ideas of the Deity. And then, Dr. Reid, who, taking the very opposite course to that of Des Cartes, very rationally brought our ideas back into the Mind; but, in order to render this possible in an unextended mind, *shaved off their extension* and thus made them conform to the nature of the mansion they were to inhabit. And lastly, (though not last in order of time,) Bishop Berkeley, who knew that our ideas are as much in the mind as "the passions of the soul;" but who at the same time would not forsake the *simplicity* of the Soul, and therefore betook himself to the most desperate intellectual leap of all, by asserting that *Extension is not any thing real,* but is a mere *illusion* of the Mind. Will it be easy for any person, who is unacquainted with the his-

tory of the subject, to believe that this is a true account of the conflicting "THEORIES," which have been given to the world, of the nature of Mind? Or, If we did not consider the undoubted calibre of the Authors of these Theories, and together with this the Superstition to which they had previously subjected their understandings, Would not any one suppose the account is more like a history of patients in a lunatic infirmary, every one of whom deemed all the others to be insane upon the subject in question? The glaring absurdity in every one of these Schemes, indeed, as well as the conflict which they exhibit with one another, is such as none but its inventor, or some other person under a most deplorable bias, could for a moment endure: And yet, *every one of these Schemes has been* endured by votaries, more or less.

The Schemes adverted to are the more to be deplored, because it must be evident that they are not cited here for any purpose of personal imputation. On the contrary, they are held up as being the *natural* results of the Dogma of the *Physical Simplicity of the Mind*, when viewed by the most different minds, in different circumstances. For it may be affirmed, with the utmost confidence, that every one of the different Theorists in question *had set out* with the assumption, *either express or tacit*, of the *Mind's Simplicity:* AND, *having made this his* starting post; it is wonderful to observe with what ingenuity his imagination, and his reason alike, have been immolated upon the altar of this Idol, through the course perhaps of several volumes, all

of which appear to him as being the very chart and scale of truth!

Of the effects of this dogma in other very eminent writers, besides the Authors of the above conflicting theories, I may instance the following: Cudworth asserts that "the Soul conceives *ex-* "*tended* things themselves *unextendedly* and *indivisi-* "*bly;* for as the difference of the whole *Hemisphere* "is contracted into a narrow compass in the Pupil "of the Eye, so are all distances yet more contracted "in the Soul itself, and there understood *indis-* "*tantly*." Upon contemplating this effusion, I would ask; Could any one imagine a more conclusive evidence, of a Mind's having immolated its reasoning faculty in a superstitious submission to the prejudice in question, than it exhibits? As another example of this kind, it is to be added that, even Dr. Clarke, who has labored so much and so profoundly in order to assert the EXTENSION OF THE DIVINE MIND, has upon one occasion fallen into a slip of conceding, (in his "*Answer to the Second Letter*,") that "Extension indeed does "not belong to *Thought*, because *Thought* is not a "Being." Is it possible for any impartial person to fail of being struck by the INCONSISTENCY of this concession of Clarke: which, the Laws of our Sensations have proved, is as fallacious as it is inconsistent. In all probability, however, Dr. Clarke, as he was certainly a Lockeian, forgot our SENSATIONS, and had only our *Interior* Thoughts in his recollection, when he fell into this inconsistency.

It may altogether be trusted that the ravages of Understanding, produced by the prejudice of the Simplicity of the Mind, are too manifest above to require the mention of any other instances of it: And we may, now, turn to the contrary examples of Locke and Hume, who refused to bow their reason to the worship of that Idol. The first of these Philosophers taught, and the second confidently subscribed to the truth, that our Sensations (and with them the Mind of which they are Modifications) are extended.

To the Names of Locke and Hume, upon this ground, are most undeniably to be added those not only of Newton and of Clarke, but no less of Malebranche and of Des Cartes, *that is to say when these Philosophers, respectively, are reduced to a consistency with themselves* upon the Subject. Professor Stewart, in the First Volume of his Elements, (pages 81, 82.) having quoted all these, and other eminent names, as asserting in substance, according with a query put by Newton, that the 'Sen-'sorium of animals is the place where the sentient 'substance is present; and to which the sensible 'species of things are brought, through the nerves 'and brain, that there they may be perceived by 'the mind present in that place;' adds a *foot note*, in which he says—"This phrase of 'the soul "*being present* to the images of external objects,' "has been used by many philosophers since the "time of Des Cartes; evidently from a desire to "avoid the absurdity of supposing, that images of "extension and figure can exist in an unextended

"mind." Now it is of very material importance to hold up this construction, put upon the matter by Mr. Stewart, as being one of the most demonstrable sophisms ever hazarded on the subject; because, if not duly exposed, it is ingeniously contrived so as to produce a mischievous effect in misleading the judgment of every unwary reader.

The *real* absurdity, then, (for a *vast absurdity there certainly was*) involved, in the phraseology in question, consisted in every one of those philosophers calling our *Ideas* by the *name of the Species of External Objects*, when most of these already knew, *and every philosopher since them has with one voice acknowledged*, that these Ideas are *Modifications* IN, AND OF, *the Mind itself;* and *are no such things as* SPECIES; *or, as* PRESENT TO the Mind. The moment, therefore, that Newton and his associates in that phraseology are put to the test, and made to confess, (what they would never advisedly have denied,) namely—that the SO-CALLED *Species of things* are the MIND'S OWN MODIFICATIONS, *i. e.* ITS TEMPORARY STATES; all these Philosophers then assert the Extension of the Mind in the most unequivocal and most confident terms, as Mr. Hume did expressly and outright. To insist, then, upon the Sophism contained in Mr. Stewart's ingenious device; I here point out the manifest truth, that, by the use of the words—*species*—*image*,—and *present to the mind*,—the philosophers in question DID NOT "AVOID" an absurdity; but they EMBRACED *an absurdity*, and *avoided a consistency;* and they *did this from a tacit holy reverence for*

the scholastic dogma of the SIMPLICITY OF THE MIND: I mean, that the reverence appears to have been *tacit or unavowed* in the case of Newton, and of Clarke; but it was *not even concealed* in that of Des Cartes and of Malebranche; so that we have the most express evidence of the reason why Des Cartes and Malebranche *turned their ideas out of their minds*, in order to immolate their reason upon the altar of a dogma, which had come down to them consecrated by the belief of the Ancient assertors of an *Intellectual Unextended Soul*, together with a *Corporeal and Extended Soul.*

When men argue for victory, it may be thought allowable to take any advantage of any opening left by an opponent. But are we to suppose that Professor Stewart, with all his study of the subject, did not discern that the REAL absurdity, in the above case, was the glaring fallacy of tacitly *putting their own modification out of their minds* by the act of *calling them the* SPECIES OF THINGS PRESENT TO *the Mind?* The explosion of this Sophism, however, renders the assertion of the Mind's Extension, by all the Philosophers in question, one of the most undeniable facts in the history of the subject.

To leave nothing incomplete, here, I shall cite the following curious *test*, to show that the Philosophers in question well knew the truth which they were virtually denying by the use of the words "*image*" and "*present to*," &c. Professor Stewart in the place adverted to, has quoted Dr. Clarke (among the rest) as asserting that, "With-

" out being present to the images of the things " perceived, the soul could not possibly perceive " them." Now, in a direct virtual opposition to this admission of *images*, and of *their being present to* the Mind, Dr. Clarke, in his DEMONSTRATION, page 53, says,—" The answer is very easy: *First*, " that *Colours*, *Sounds*, *Tastes*, and the like, are by " no means Effects arising from mere Figure and " Motion; there being nothing in the Bodies them- " selves, the Objects of Sense, that has any man- " ner of similitude to any of these qualities: but " they are plainly *Thoughts* or Modifications of the " Mind itself, which is an Intelligent Being." The test, then, of the *two contending phraseologies*—the *true* and the *false*—being used by the *same Author*, is here complete.

Upon this last quotation from Dr. Clarke, one observation is requisite: When he therein denies that Colours, Sounds, &c. have any manner of similitude to Extension and Figure; he does not mean to deny that Color *is extended and figured:* he only means to deny that a Sensation of Color, *as a Mere Tint or Hue*, is resembled by any thing in Body. I impute this rational distinction to Clarke because he was a Lockeian, and because I have shown elsewhere, in this treatise, that such is Locke's Doctrine of the Subject. And it admits of no demur that both Des Cartes and Malebranche held the same; or, else, they need not have turned Colors, &c. out of their minds, for want of room therein to contain them. I suppose this explanation may be of service to beginners of

the Subject; who might otherwise be apt to suppose, (as I myself once did,) that the doctrine of non-resemblance held by Reid was not carried farther, and was no other than the doctrine of non-resemblance held by Locke; whereas, they must note that the Reideian doctrine is far beyond, and is most seriously different from the Lockeian.

In fine; A more indisputable extent of proof was never exhibited, than has been done above, of the fact that the Human Mind has been *avowedly* held to be EXTENDED, *and* NOT SIMPLE, by all Philosophers who have not suffered their reason to be overcome by a reverence for the Scholastic dogma of the contrary; and that, the *very same* has been held *tacitly and virtually* by all Philosophers who have employed the phraseology of *species, images, and present to the Mind.* At the same time, it is manifest that the phraseology just mentioned is most certainly fallacious and exploded: which fact leaves the doctrine of Locke—namely—that Colors, &c. are the Mind's own Modifications, Affections, Actions, or States,—the real Standard Truth upon which the whole Science of Mind must for ever rest.

One thing, however, still remained a desideratum, in order to extricate the Ground of all Extensionists, from a mystery which had all along enveloped it; and which involved that Ground in a very awkward and uncomfortable uncertainty. The want in question was, to *determine the* MANNER or RATIONALE *of the production of* PERCEIVED FIGURE *from our* SENSATIONS. Through an oversight al-

together wonderful, the way of nature in this process, (eminently simple though it is,) had never been detected, as is now sufficiently known from the endeavour of Professor Stewart, to adduce authority for at least a knowledge of the *vague generic fact which involves* the rationale in question. It was in this state of the Subject, (that is previously to the starting of the involving general fact at all by Mr. Stewart, in his Dissertation in the year 1815,) that the suggestion of the Laws of Vision was effected in successive gradations: which have since been embodied, together with a full statement of the *Various Modifications* of these Laws of our Visual Perception, and of the Various *considerations bearing upon the subject*, in my First Lines of the Mind: From which last, as a basis, the present Manual has been constructed, by leaving out the collateral, and in one sense inessential considerations in that Work, and introducing new matter, which I deem as constituting some real and very material features of the Subject. Among these, for example, the Section on our THINKING IN COLORS may be mentioned here, in particular; although it is only one of several additional considerations, which gave rise to the present volume, and which, I trust, will form an accession to the extent of fact previously possessed on the subject.[1]

[1] In reference to the First Lines, it may be proper to inform such readers as may require it, that the present treatise is in no part a transcript of the former, unless in the case of some very brief quotations.

The contempt entertained by MATERIALISTS, for the assumption of the Inextension of the Mind, need not be insisted upon here,—it being too well known. And, if PHRENOLOGY shall advance in the general estimation, it cannot fail to spread the doctrine of Materialism. But Materialists are deceived in concluding that, if their creed with regard to the nature of the Mind be true, it proves MATERIALISM ALSO, *together with all its supposed consequences*, to be true: For, the legitimate conclusion, to which Philosophy must force our assent *after the proof that Mind is an extended essence*, is, (as will be seen in the next section,) that ALL BODY IS MIND.

SECTION SECOND.

OF THE PRINCIPLES OF PHYSICAL THEOLOGY.

PRELIMINARY OBSERVATIONS.

THE sound Philosophical Idealism of Locke was not only wanting, in itself, of that ultimate and analytical proof of which it admitted: but it was also *unapplied* by him, to the most important of all its uses—that of determining the Nature of the External World. Mr. Locke took the assumption of a Material World upon the doubtful evidence of former ages, and so he left it; without attempting, like Des Cartes, to prove the thing upon an assumption that the Deity would not deceive us in the prejudice we receive for it; or essaying, like Berkeley, to effect the contrary by an appeal to *his* supposed nature of Ideas.

To those who have any competency on the subject it will appear, very decisively, that the want of being able to show the "MANNER" OR RATIONALE, by which *Perceived Figure* is produced from our *Sensations*, must have placed Locke, and all preceding inquirers, in a state of very awkward uncertainty on the subject; and have prevented the possibility of any comfortable speculation with regard to the Nature of the External World. And Des Cartes' uncalled-for trust in God, for the truth of our prejudice for a Material World; and

Dr. Reid's assertion that we *actually perceive such a World by a sort of inspiration;* are sufficient evidences of the state in which the uncertainty with regard to the rationale of perceived figure had placed them.

The attempt of Berkeley to disprove a Material, and to prove the existence of a Spiritual World, (it is well known,) was invalidated by the fact that those *Detached Substantive Ideas,* the existence of which he assumed as his DATA, are altogether visionary things; and those which really exist in our Minds are its own Modifications. And the failure of Bishop Berkeley, through his having built upon chimerical data, has left open the field of the following reasonings.

Definitions, First Principles, Extent and Limits.

As far as the reader has travelled, in the foregoing Section, he has travelled *in his own Mind:* He has had nothing at all to do with speculating on the *External Cause* or Occasion of his Sensations; or, with the nature, or modifications, of any other Being than himself. But, in order to advance farther, he must now quit that Department; and must enter upon a consideration of the Minds of *Other Beings.* In order to do this, the following is a rule for his government; to which he is required to conform.

In any department of Natural or Inductive Science, we can possess only a *very small comparative extent of actual induction,* upon which to rest our

general conclusions. The Natural Historian, the Mechanical Philosopher, or the Experimental Chymist, having satisfied himself by experiments upon the nature of a number of individuals of any kind, without ever finding any instance to the contrary; thenceforward assumes with confidence the same conclusions, as being applicable to all individuals of the same kind. And, in this proceeding, the evidence of the *testimony of other experimentors* is received as unquestionable. The case of the Physiologist of Mind is a good deal similar: though it presents, undoubtedly, a *stronger* ground of credibility, than that of the Natural Philosopher, in any of the above mentioned departments: because the former, after his having satisfied himself of the Physiological Laws of *his own* Mind, has, in the *speech*, and *actions*, and *writings*, of other men, *internal* evidence that those men have Minds constituted exactly like his own; and he has, therefore, the strongest possible ground for EXTENDING BY ANALOGY all the essential attributes of his own Mind, to the Minds of all other men; and, *beyond this*, to the Minds of ALL OTHER BEINGS WHICH HAVE MIND: And he is *bound* to extend these Laws accordingly. If he should, for a moment, attempt to deny this result; he would cease to proceed as a Newtonian Philosopher, and would prove himself to be the slave of some prejudice, which he cannot defend, and perhaps dare not avow, even to his own conscience. Is there, for example, any Newtonian who denies gravitation to the Stars, after having ascertained that property

to belong to our Solar System? This precedent being subscribed to; the reader is introduced to the Second Stage of the Subject.

THE NAME PHYSICAL THEOLOGY is assigned, here, in order to distinguish the present Subject from that Natural Theology which teaches the Existence and Attributes of the Deity from the MORAL Appearances in the Economy of Nature.

Physical Theology is, in point of fact, an Integral Department of the Physiology of Mind. The former grows out of the latter, as certainly as the Physiology of Other Human Minds is demonstrated by that of every man's Own Mind. The knowledge of this Science ought to form a subject of momentous interest to all Religionists; the far greater number of whom can have neither time, nor interest, for entering farther upon the *Superstructure or Various Departments* of Pneumatology.

1.—THE FIRST PRINCIPLE in Physical Theology is the fact, gathered from a collection of reason and assented to universally by Philosophers, that our Exterior Modifications are excited, or called into existence, by an act of *Some External Agent.*

2.—It having been previously demonstrated, by the Laws of our Exterior Modifications laid out in the foregoing Section, that these Modifications are *extended;* It becomes conclusive that the External Agent of these is an *Extended Agent.*

3.—But, not only is it demonstrated, from the Extension of our Visual Modifications, that every man's own Mind is an *Extended* Substance; but

we know from Consciousness that every man's mind is a THINKING Substance. And, as we have *no knowledge of any extended substance,* except the extended substance of our own Mind, (and, by indisputable analogy, that of *Other Human Minds;*) we are BOUND to conclude that the External Substance whose action or energy occasions our Exterior Modifications, INASMUCH AS THIS SUBSTANCE ALSO IS EXTENDED, *is a* THINKING Substance. It is certain that no Newtonian could for a moment deny this conclusion, without thereby forfeiting the Name of a Newtonian.

It is moreover to be asserted, here, as a consideration by the way, that the evidence we have for the conclusion, last laid down, is, of the two, of a higher, or at least a more immediate kind, than that we have for the conclusion that the Minds of *other men* are extended, like our own. Because, neither are our Exterior Sensations occasioned by any action of the Minds of *Other Men;* nor do these last mentioned minds ever come into *any immediate physical correspondence* with our own mind. And it is certain that, how solid soever is our ground for concluding that the Minds of other men are extended like our own, this conclusion rests upon a *mere inference* of *analogy;* whereas, we are *acted upon immediately* by a portion and action of the *Extended Surface of the Great External Mind* COMMENSURATELY *with the Superficial Extension of the Sensations which it calls up in us,*—a fact which is universally recognised by those, even, who believe the External Agent to be DEAD

MATTER: for there has existed no difference among Philosophers (Berkeleians and other Extravagants excepted) with regard to the fact that the Great External Agent is *extended;* and the only existing difference has been upon the question, *Whether Extended Body is* MATTER, *or* MIND? Now, the last mentioned question is laid for ever at rest, *unless the Laws of the Interlimitations of our Visual Sensations can be impeached:* For, nothing short of this can ever disturb the Physiology of the Human Mind; or shake that basis of Physical Theology which is founded upon it.

As, however, the analogy of the General Physiological Structure of the Minds of *Other Human* Beings, and of *all such of the Inferior Animals* as are actuated by *sensations of* COLOR, or of TOUCH, to that of each man's own mind, is the consideration which, of the two, may appear to be the more immediately forcible upon the conviction of ordinary persons; it appears to be cogent, here, to enter into a consideration of the *extent of induction* which we have of the Extension of Mind in the case of the endless millions of Human, and of other Animal Beings, which, in their successive generations, cover the face of the earth. It is beyond a doubt, then, that ALL the animal Beings on earth, both large and small, are modified by *either* BOTH, or ONE, of the Two Species of Sensation just mentioned; to say which, is to say that all these countless millions of minds which now exist; and all those millions which went before, and shall follow after them on earth; are so many

portions of what may be called a *Vast Ocean of Extended Minds*,—an Ocean of Minds so Vast, that, at each existing moment of time, it may be said to form a *close-set Stratum or Covering over the Whole of our Terraqueous Globe*. Nor can we refuse to *extend* this fact, by analogy, to the Surfaces of *All Other Earths and Stars*. The reader, therefore, is required to contemplate the fact, (for a *demonstrated fact* we have seen it is in the case of *our own* mind,) that the Whole Envelop of the Universe, wherever there is Earth or Star, is *One Vast Congregated mass of Extended Minds;* to which, the innumerable sustaining Orbs of Creation serve as a support. And, then, let him ask himself, AS A NEWTONIAN PHILOSOPHER, Whether he can *legitimately entertain a doubt* that EXTENSION, wheresoever, and whensoever, it is manifested by the act of any Being, must be an ATTRIBUTE OF MIND? In putting which question to himself, he must, as a Newtonian, recollect that he proceeds upon the principle, (which for the sake of the ordinary reader I shall speak more about presently,) that *not one instance of a detection of* SOLID *Body has ever come in his way to break the* UNIFORMITY OF THE INDUCTION THAT MIND *and* EXTENSION HAVE ALWAYS BEEN FOUND TOGETHER. And, along with this, he will take in the additional consideration, that, Mind being demonstrated to have Extension, *there could be no possible* USE *in a Third Agent, of the Nature of Matter; since* MIND ITSELF *possesses that Attribute by which all physical action can be carried on.*

In order that a reader should be at all adequately impressed with the truth of the *aggregate magnitude* (so to speak) of the Ocean of Mental Extension which exists upon the surface of our own Globe, it is requisite he should be aware that, besides all the *perceptible* animal Beings on Earth, the whole Sea and Lower Atmosphere, not to say Animal and Vegetable Bodies, are full of Animals that are *imperceptible;* inasmuch, that *Extended Minds* make up a real sphere enveloping this, and in all probability every other globe, generally speaking.

It remains to be called to attention here, in order to assist the conception of the reader, that, HAD MANKIND BEEN BORN with a knowledge that Red, Blue, Yellow, &c. and their various *Interlimitations,* are Modifications of their own Minds, and are not coverings adhering to the outsides of distant bodies; they *must,* in that case, have recognised EXTENSION *and* FIGURE *as being attributes* of MIND ONLY; and they *never could* have conceived such a thing as DEAD MATTER. This result may, at first sight, appear to ordinary persons to be not altogether obvious: But it may be affirmed, with the utmost confidence, that *no other result could* have occurred in the human mind, in the case supposed. There is no person, who is competent to the subject, who will for an instant deny this conclusion, after having given the premises a due consideration.

To this consideration may be added; although it is granted, here, that authority can be no authority in a Treatise of Science; yet, considering the

nature of the science in question, I think we could not in the present case, with any justice, leave out of our contemplation the Conclusion of the Ancient Asiatic Philosophers, as reported by Sir William Jones, concurred in by the Greeks, and not denied by the most profound of the Modern Europeans, —namely—that "ALL SPIRIT IS HOMOGENEOUS; "*that the Spirit of* GOD *is in kind the same with that* "*of man, and that, as material substance is mere illu-* "*sion, there exists in this Universe only one Generic* "*Spiritual Substance, the sole cause, efficient, sub-* "*stantial, and formal, of all appearances whatever,* "*but endowed in the highest degree with sublime pro-* "*vidential wisdom.*" But, if this conclusion be admitted; it, of itself alone, decides the question in the affirmative (*independently of the Newtonian argument above insisted upon,*) that, *As our own* Minds are démonstrated to be Extended, the INFINITE Mind must be concluded to be the like.

Along with what has been advanced, it is a *great ground of confirmation* on the Subject, (as was hinted a little back,) that NATURAL PHILOSOPHY has, during the last two Centuries, or throughout its whole progress until the present moment, *been advancing uniformly, from the opposite direction, to* MEET the conclusions of Physical Theology. In a word; Natural Philosophers, one and all, are agreed with the utmost confidence, that *One Particle of Solid Matter has never been discovered in Nature;* although Matter has reigned, from the earliest times, in a *Definition.* Together with this, is to be taken the fact that, *although the Solidity* of Body is

universally denied, yet the *Extension of it* has never been either denied or questioned, except in the extravagance of the Berkeleian Metaphysics. All Philosophers agree to consider Body as made up of *Spheres* of attraction and repulsion, *round a centre of some sort.* Hence, although no fact of *real* contact, between the *supposed Solid* centres of Bodies, is ever discovered; yet, when two Bodies (as for example two billiard balls) meet, it is impossible to doubt that there is a *real contact* between the *Outer Spheres* of Repulsion of each Body. The endeavour of the Reideians, therefore, to invalidate the doctrine of Locke and of Newton—namely—that *all Bodies*,—and *all Minds also*,—*act upon one another by impulse*,—is one of the most bottomless attempts that ever sunk under a Philosopher. Is it possible, then, that any competent and unprejudiced person can hesitate to pronounce the belief in SOLID Body to be no other than a prejudice, which must never any longer be entailed upon the understanding of any person above the lowest vulgar?

Of the Origin of Physical Theology.

It is here an object for the consideration of Religionists, and equally of those who would oppose Religion, that they never before had for their contemplation the KIND of Theology which is founded in the Laws of our Visual Interlimitations. For it is certain that no such thing is presented,

either in the Berkeleian Scheme of Detached and Permanent Substantive Ideas; or in the Scheme of Malebranche, which supposes us to perceive the Ideas of the Divine Mind; any more than in the Reideian Scheme, which assumes that we perceive Matter, or its Quantities, by inspiration. At the same time, it is proper to observe that, the Speculations of Berkeley and of Malebranche, respectively, however visionary they were as to fact, are sufficient vouchers to Religionists, that any proofs of the Spirituality of Body must be altogether congenial with the tenets of the Roman, and equally of the Protestant Religion; as it certainly is with the Mosaic account of Creation.

It is, indeed, an essential consideration for every Religionist, who has any tincture of Philosophy, that the Theological Ground in question annihilates, in the most complete and beautiful manner, that of the Greek Atheists, in the most stubborn and insuperable of all their maxims—namely—that, *Out of Nothing, Nothing can come.* Along with which maxim, they *coupled a belief in the existence of Matter.* And, from these two tenets, taken together, it obviously followed that Matter must be *eternal, necessary, and independent of any Creator.* Or, in other words, they made that creed serve for a *justification of Atheism.* And certain it is that, no assumption was ever more revolting to human reason, according to Philosophers of every age, than that of a *Creation of Matter out of Nothing,* that is if we suppose matter to *accord to its Usual Definition.* But, when we turn from De-

FINED Matter, to contemplate the Philosophical conclusion of the SPIRITUALITY OF BODY; *an act of creation out of nothing ceases to have any mystery in it:* the word—CREATION—herein importing PURELY AN ENERGISING *of the* INTELLIGENT FIRST CAUSE UPON HIMSELF *and upon Finite Minds*,—a fact which Dr. Clarke (even without knowing the Laws of Vision) had deemed *supposable*. Such an *Acting, or Energising*, moreover, it is to be insisted, is a TRUE REAL CREATION, *in the strictest sense of that term:* because Every Sensation and Thought, Every Energy, and Every Action, of every Being; each of all which energies is *Only a Modification* of some Being; is an Essence which *comes absolutely out of nothing*, and returns to nothing again unless it be continued by some adequate Power. SUCH IS THE UNIVERSE WHICH (according to the Principles of Physical Theology above laid down) GOD CREATED AROUND US; *but which* WE NEVER PERCEIVE, and which we *know only from a collection of our reason:* Such, the Sun and the Earth, and all other Stars and Earths, and the Bodies of all Men and Animals; all which have NO SUBSTANCE *but the* SUPPORTING SPIRIT which ENERGISED IN THOSE MODIFICATIONS which *we call by the name of Stars and Earths*, and the Creation of which will last so long as HE shall *continue those acts of energising*. FOR, *to* CREATE, and *to* ENERGISE, mean *one same thing*.

It is deserving of remark, how closely the Mosaic account conforms to this deduction from the Principles in question.

Thus:—" By the Word of the Lord were the " heavens made; and all the Host of them by the " Breath of His Mouth."

" In the beginning God created the" (substance of) " heaven and the" (substance of) " earth."

" And the Spirit of God moved upon the face of " the waters."

When we consider that, this account was delivered in a language almost insuperably figurative; and this to a people so ignorant of physical science that their imagination must have revolted against any assertion that Stocks and Stones are not Solid Material Things; it manifests, instead of any discrepancy, a very wonderful congruity, with the Physiology of Mind laid down in the foregoing pages.

And if we take in *other* features of the Mosaic History; the result is equally compatible with it.

Thus:

" And the Lord God formed man of the dust of " the ground."

That is,—Of those *Minute Energies* of the Deity, which we call, (and which he designed, in a state of knowledge such as that which the Jews were in, that we *should* call, and *believe to be,*) *dust of the earth,* he formed the *Body* of Man:—After which, it figuratively says,—" God breathed into his nos- " trils the breath of life."

Again:

" Shall the dust praise thee; Shall it declare " thy truth."

That is,—When God pleases to discontinue that

Compages of his Minute Energies, which we *vulgarly call Dust of the Earth so long as they constitute a Human Body;* and, *by that discontinuation, leaves a Human Mind* in a state of *oblivious rest,* owing to its being no longer actuated from without; SHALL THOSE ANNIHILATED ENERGIES *praise* Thee: Shall *they* declare Thy truth?—And, What question could have been more cogent, than this? FOR *Energies are not Beings;* and far less are they *Minds or Intelligent* Beings; and How, then, could these Things praise their Creator, even during their existence; any more than Dust of the Earth, if such a thing existed, could praise Him. Upon either supposition, it is self-evident that MINDS ONLY can *praise,* or *dispraise.*

The instances given above are intended merely as hints, to show how the Mosaic account, *in general,* may be explained as well upon the foregoing Principles of Physical Theology, as upon the exploded Hypothesis of Dead Matter.

It may, indeed, be repeated here, on account of its importance for the satisfaction of Religionists, that, from the Speculations, respectively, of Malebranche, Berkeley, and others, there cannot exist a doubt that the present Physical Theology is perfectly consonant with the Hebrew Scriptures.

These observations, on the congruity of the Mosaic History with Philosophy, may be closed by the remark that, any attempt to interpret that History by the Hypothesis of DEAD Matter,—even had that Hypothesis not been exploded by the Physiological Principles laid down,—would for

ever prove the most deeply baneful to the cause of Religion that could be essayed. In proof of this; I note the fact here, that the Christian Philosopher and Founder of the Inductive Logic,—LORD BACON —was as much revolted at the *Creation of Matter* (he taking it to be DEAD Matter) *out of nothing*, as were the Greek Atheists themselves; insomuch that, he emphatically says, *it is to be taken on* "FAITH." And it is for all persons well to weigh the fact, that, as long as all the Intellectual Classes of mankind shall agree, with Locke and the Illustrious Churchmen who took the same ground, to build their Religious belief upon a basis of Philosophy; (which will be as long as Philosophy shall exist;) their understandings will *insuperably war in utter hostility against the* VULGAR acceptation of the Word MATTER, *when coupled with an assertion of its* CREATION; and the least evil result of this must be that, Atheists will derive a *real triumph from their dilemma*.

Of the Hindoo Physical Theology.

The only supposition of a Physical Theology, concerning which it can be a question, Whether it may, or may not, have existed at any period prior to the Origin of that above-stated, is that of the Ancient Hindoos. But, from the single ray of light which has penetrated the gloom of ages, on this point, it is impossible to decide upon it. The Hindoo Tenet; which asserts that "*The whole of Cre-*

" *ation is rather an energy, than a work, by which* " *the infinite mind, which is present at all times, and* " *in all places, exhibits to his creatures a set of per-* " *ceptions, like a wonderful picture or piece of music,* " *always varied, yet always uniform;*"—may, with some allowance, be interpreted *two ways*. It may be supposed to coincide with the result of the Laws of Primary Vision; which prove that WE NEVER PERCEIVE the Works of External Creation; *but* PERCEIVE ONLY *our own Modifications,* and then INFER *the existence of the Qualities* of the External Bodies of Creation *from a collection or process of reasoning*. Or, if the Hindoo Tenet be taken to the *letter,* it must be thought to coincide with the Scheme of Malebranche; which last, however, was most certainly visionary. The most reasonable conjecture seems to me to be, that the Laws of Primary Vision were *known* to the founders of the Hindoo Theology; and that, in their recent origin, these Laws have *only suffered a revival,* after having been for so many ages lost to mankind. Uncertainty must for ever rest over this conjecture. But, if the above supposition be *made,* (and I am freely ready to grant it, as a thing probable,) then, the Hindoo Tenet amounts, in substance, to this—namely—that the EXTERNAL EXTENDED INTELLIGENT CAUSE of our Sensual Modifications, *which Cause we never perceive,* but *learn its existence, and qualities, and operations, from our reason,* " is rather " an energy, than a work, by which the infinite " mind, which is present at all times, and in all " places, exhibits to his creatures a set of percep-

" tions, like a wonderful picture or piece of music, " always varied, yet always uniform."

I have dwelt upon this Hindoo Tenet, more particularly here, in order to show in what way it may be applied and reconciled; because I know not any object, in the Science of Mind, that can compare in importance with that of its furnishing a demonstrable Natural Theology. And here it is plain that, according to the interpretation last supposed, the "*perceptions*" which the Deity by means of his Energies "EXHIBITS TO" (perhaps the Tenet might *originally have meant* CALLED UP IN) his creatures, are PERCEPTIONS OF THEIR OWN MODIFICATIONS. It is at the same time certain, from the Laws of Vision, that the Hindoo Theology cannot be true upon any other interpretation; but must involve a vast fallacy, coinciding with that of Malebranche.

There are two other possible suppositions on this question; each of which, indeed, carries some appearance of probability. *First;* Supposing the Laws of Vision were known to the Ancient Hindoos, they might, still, have *fallaciously* believed, from them, that we discern *External Objects*, in the way supposed by Malebranche. And this is rendered probable by the fact, that the profoundly erudite, acute, and metaphysical Dr. Parr, although he knew and assented to the Laws of Vision, mistakingly attributed to me the belief that "*the "Deity is visible in his works.*" *Secondly:* The Ancient Hindoos might have had *no knowledge* of the Laws of Vision; but may have proceeded upon

the *same extent of evidence,* that we perceive only our own extended Modifications, which Locke insisted upon. If this last supposition was the fact; it follows that, the *ground* of their proceeding was perfectly solid: but, only, they wanted that *extent and kind* of proof of it which constitutes Science, and forbids the attempts of schismatics.

But, whatever was the fact of the *precise specific* nature of the Hindoo Tenet; One consideration is to be held up, here, as calling most loudly upon the attention of the learned, and of all persons, in our own age and quarter of the globe; *which is the* SUBLIMITY, *as well as the* TRUTH, of its more GENERAL nature—namely—that, the EXTERNAL CAUSE of our Exterior Sensations, (*being extended like those Sensations,*)—is a SENTIENT AND INTELLIGENT, *as well as an* EXTENDED Substance. This truth is the *common* philosophical deduction, arising alike from the Hindoo Tenet *whatever it was in detail,* and from the Laws of Vision. And, therefore, Let every person, of any pretension to general knowledge, well reflect upon this coincidence, especially when they consider, as they are bound to do, the Source from which the Hindoo Tenet is derived. It is beyond dispute that the Philosophy of Hindostan is older than that of the Greeks. And few will deny that the Greek Philosophers derived their knowledge from that Quarter. There appears no improbability that the former existed, even, antecedently to the Deluge. And, what is of far greater weight in the subject, it is an unde-

niable truth that the Tenet in question made part of a Body of *General* Science, the remains of which prove it to have amounted to a very great height of intellectual attainment. One should think that the slightest degree of reflection, upon such considerations, must serve sufficiently to rouse the attention of every man of education to a lively sense of the *debasement* which it presents, when viewed in contrast with the foregoing sublime deduction, to find Modern Metaphysicians *immersed in the belief of a Dead Material World* in consequence of that creed's having been adopted by the early Greek *Atomists*,—a Creed which was notoriously rich in the production of Atheism among the Greeks themselves of those ages,—and which has sufficiently germinated, in the same way, in modern times. It is quite certain that PHILOSOPHERS have not adopted the belief in Matter from the *Mosaic History*, in any age: but have derived it from the source above-mentioned, always backed, of course, by the *natural bias of the species* to accept it. And when, to this comparatively *small and trifling extent* of Atheism, we add the effect of the introduction of MATERIALISM into *Asia;* which innovation, of its day, has for many ages deluged the Population of all China, and that of a great part of India, under one common ocean of a most demoralising belief *in* NO POWER EXCEPT MATTER; What fatuity must it be, if any extent of reflection on such facts can fail to rouse us to a sense of their magnitude, and *sure tendency*.

IN GENERAL, there is a strong tendency in the

human mind, in the case of those who are at all raised above the mass of the species, to think *aloof* from the Vulgar. This tendency, proceeding from innate human vanity, is too often manifested upon very trifling and ridiculous occasions; and not seldom upon utterly groundless ones. Wonderful must it then be, if the better informed classes should not be struck by a sense of the VULGARISM which is yielded to,—(for a vulgarism it most certainly is, and no better,)—when they tolerate the belief in Matter, in the Atheistical sense of that word.

It has already been adduced, that Natural Philosophy, since the time of Newton, has been advancing with a uniform pace to explode this vulgar notion of Matter. But, while this great end was thus effecting in *Natural Science;* the *Metaphysical enterprise of Dr. Reid* was set on foot, to restore, upon *alledged Pneumatological ground,* that basis of Atheism which was already, in fact, *exploded upon Physical.*

The attempt of Dr. Reid, in effect to counteract all the advances of Natural Philosophy in its proving the Immateriality of Body,—an attempt by which the Reideian School has lamentably, as well as most fallaciously, been only laboring to prop up the cause of Atheism; although it is to be admitted that the Writers in question were purely free from any such mischievous intention;—was one which has been marked by a greater extent and variety of striking inconsistency and absurdity, as

well as with greater despotism of unproved assumption, than were ever found united in any scheme of speculation, that I am aware of. An account of the manner of the Conversion of Reid, from the Berkeleian Scheme of Ideas, is far too important to the advancement of the subject not to claim a distinct place in the sequel of this treatise. But his procedure with regard to the doctrine of a *Material World* cannot be passed over in silence, in this place, since it must operate so strongly upon the judgment of whomsoever shall attend to it along with what has been stated above.

Dr. Reid, in his "INQUIRY," assures us that, "The belief in a material world is older, and of "more authority, than any principles of Philoso- "phy. It declines the tribunal of reason, and "laughs at all the artillery of the logician. It re- "tains its sovereign authority in spite of all the "edicts of philosophers; and reason itself must "stoop to its orders."—The "*edicts of philosophers*," here meant, are the edicts of *two philosophers* ONLY —namely—BERKELEY *and* HUME. And, unfortunately for the philosophical fame of Dr. Reid, he little knew, when he was uttering the above exulting proclamation, that, soon after, *a light was to break in upon Europe from the East*, to show that "REASON" had led millions of mankind, during many ages, to a discernment of the truth that a belief in Matter is no other than a *natural bias in unphilosophical men;* and that millions of men living in those Countries, in his own time, retained this very same creed of reason.

But the case of Dr. Reid, with regard to the above-mentioned effusion, does not end here: For it is marked by a feature which is still more unfortunate for his fame as a Philosopher. In his "ESSAYS," in describing the Berkeleian Theory, he, with very laudable sincerity, says—"*I once "believed this doctrine of ideas so firmly, as to em- "brace the whole of Berkeley's system in consequence "of it;* till finding other consequences to follow "from it, which gave me more uneasiness than "the want of a material world," &c.—(The consequence, which so alarmed him, was Mr. Hume's *Pyrrhonic Bugbear* about the *non-existence of both Body and Mind:* but this is of no moment here.) Now it is certain that Dr. Reid *could not have been under the age of manhood, when he "embraced the "whole System of Berkeley.*" And, *if a belief in a Material World is a* LAW OF OUR NATURE, "*supe- "rior to Logic, and to Reason;*" How, then, was Dr. Reid, *at the age of manhood,* enabled to *break through this Law of Nature,* and to join the standard of Berkeley against her? And, still farther than this; after Dr. Reid had *so apostatised from the Law of Nature,* and had *remained some time in a state of rebellion* against her; How could he think that Nature would ever pardon such a step, although some other power had made him return to her School?

Is the Intellectual Character of this Country to be ridden over; and to be trodden down beneath a chaos of inconsistencies made up by such a floundering in speculation as has assumed the

garb of Philosophy in these *Counter-apostacies of Dr. Reid?*—That he *must* have believed in Matter when a *boy*, is certain; because *all the boys that ever were born have done the same*. *First*, then, he DID believe in Matter.—And, *then*, he DID NOT believe in it:—And *then again*, he DID believe in it !!! AND THIS IS PHILOSOPHY !

After so remarkable an exposure of the philosophical inconstancy of Dr. Reid, in which he has certainly rather resembled a Weather-cock than a Philosopher; it can hardly be doubted that the lofty tone of unproved assumption with which our *alleged perception of external matter or its qualities*, and the ALLEGED INEXPLICABILITY OF THE MANNER of our perceiving these, has been kept up through the long lives of the two Founders of that Scheme; (in the course of which, the doctrine of Locke and Newton concerning *impulse and the presence of things in Causality* has been treated with such an affectation of contempt;) must find its proper value in the general estimation, and can no longer mislead any person of the least degree of competency in the subject, especially since it has been in the end consummated by Professor Stewart's acknowledgment that the MANNER of our perceiving is NOT inexplicable. But the METHOD OF PHILOSOPHISING of the School of Reid is too exceptionable, to leave it without more particular animadversion in the sequel of this volume: because, if the present state of Pneumatological Science should not be rendered herein so manifestly imperative upon our own Countrymen, as to rouse them to a due sense of what is at stake; it must

be left to the Men of other Nations to rescue Philosophy from the disgrace, and Mankind from the miseries, with which the error is pregnant.

Why such discredit should await the Country which gave birth to Locke,—Why the future Philosophers of France, or of any other Country, should snatch from us the lead in shaking off the philosophical ignominy which will at no distant time attach to a belief in Matter,—I think it is impossible to say. The strongest reason against our emancipation from this belief is, the *vulgar prejudice arising from our early natural bias.* The next strongest reason, is this same prejudice.—And the third reason, again, is this prejudice.—And there is no other than a repetition of this same reason, if we should go on asking, to infinity. In fact, NO OTHER REASON HAS BEEN CLAIMED *for this belief by either* REID *or* DES CARTES,—*its two principal advocates, and the* ONLY advocates who have *ever attempted to assign a reason* for it. It would be just as philosophical, that is it would be the *very same sort and depth of fallacy,* never to believe the evidence of our TOUCH, *backed by all the evidences of the application of the thing in the Arts,* that a *strait plank,* seen part under water, is *in reality* strait, because our EYES seem to us never to proclaim it as being other than *crooked;* as it is to believe, from the fallacy of our early natural bias, that BODY *is* MATERIAL. There is no jot of difference in UNREASON, between the profound fallacy of the case here first supposed, and the popular error of the last.

In fine: It has followed, from the Physiological

Laws of our Sensations, that Pneumatology has joined hands with the FACTS of Natural Philosophy, to proscribe the belief in Matter as being a Badge of Prejudice and a Reproach to a Philosophical Nation. And Natural Philosophers *freely admit, from the facts,* that MATTER IS NOTHING BUT A PHENOMENON. Then Where (one is tempted to ask) can be the *actuating motive or interest,* any more than the REASON, for tolerating such a reproach as this: which, so long as it shall be borne, must stamp the Philosophers of Europe, in their character of Pneumatologists, as being dark and barbarous when compared with those Sequestered, Contemplative, and Sublime Intellects, which, Four Thousand Years ago, or at a still earlier date, from the depths of a profound abstraction, led the understandings of the Millions who occupied a large proportion of the Earth, in a united and holy acknowledgement of the Physical Operations of the Deity, upon their Own and other Finite Minds?

That the Human Intellect has not degenerated in POWER, since that epoch, is certain. If, therefore, it be sunk at all; it is from being seduced by, and absorbed in, the transitory concerns of an advanced community; most of which are mixed up, and identified, with those ARTS in which *supposed Matter and its operations* make the sum of existence. It was this ALL-SUFFICIENCY *of supposed Matter* that broke in upon the Fabric of the Hindoo Theology; and overran a large proportion of the regions which were adorned by its sublime

Tenet. And it is impossible for any deeply-reflecting mind, after due consideration of the whole subject, to entertain a doubt that the progress of Physical Science, unless it be accompanied by a consistent co-operation with the Physiology of Mind, will, sooner or later, produce a similar devastation in the intellectual character of European nations.

In the existing State of the Subject, at this moment, Nothing seems to require being other than it is in result of the agreement between Pneumatology and Physical Science, except one,—namely—a UNIVERSAL APATHY on the subject.

Of the Extent and Limits of Physical Theology.

To resume our Science, here: Having laid down its Principles; it is proper to point out the limits of its extent and application.

Physical Theology, then, as delineated above, constitutes a THIRD Distinct Demonstration of the Existence and Nature of the Deity; in addition to TWO OTHERS, which had before obtained. And Each of the Three is altogether DIFFERENT IN KIND FROM, *and entirely independent of*, the other two.

The *First*, which may be mentioned of these, on account of its more diffuse ground and requisite extent of expatiation, is that which is called NATURAL Theology; and is comprised in our apprehension of the Power, the Wisdom, and the Good-

ness, of God, as displayed in the Laws of his Providence. The *Second*, is comprised in the celebrated "DEMONSTRATION—*a priori*,—of the Necessary Existence and Attributes of God," as laid out in the Argument of Dr. Clarke. And the *Third* is founded upon the Laws of the Interlimitation of our Exterior Sensations, as laid down in the First Section of this Manual.

That each of these is altogether different in kind from, and independent of, the other, is a truth which must be perfectly manifest. Each, therefore, is in fact a Theology of and by itself. The *Demonstration* by Clarke is a *demonstration—a priori*—founded upon *Two Facts*—namely—that *Something* (—namely—*External Body*) *now exists;* and that SPACE, also, is an EXISTING Thing OR REALITY: In which argument of Clarke, it is plain, we have nothing at all to do with the *Internal* Laws of our *Sensations themselves.—Physical* Theology, on the other hand, being founded in the Laws of the Interlimitation of our Sensations themselves, has nothing to do with a demonstration of the NECESSARY existence of ANY EXTERNAL CAUSE of these Sensations. And, lastly, *Moral* Theology is founded in arguments which have nothing to do with the evidences of either of the former. All these assertions with respect to the Subjects in question, however, *are to be limited by special considerations*, and by an *admission of a certain connection* between the whole three.

Every one of these Three Arguments, therefore, must undeniably be admitted to be of great impor-

tance, inasmuch as three independent grounds of a Knowledge of the Existence and Attributes of the Deity must be proportionately more desirable than one.

The foregoing distinctions, between the three Subjects in question, being pointed out; it remains to speak of their respective claims and extent, in comparison with each other; and to point out their different lines of demarcation. This must be a matter of very material importance, to those whom the subjects concern.

The "Demonstration *a priori*" by Clarke, then, (as is expressly and duly acknowledged by its Author) does not extend so far as to indicate that the Necessary First Cause of Things is an INTELLIGENT Cause: And the proofs of Intelligence, in that Cause, are properly assigned over to the evidence—*a posteriori*—manifested in the works of Creation. At the same time, the Demonstration *a priori* has this much against it, at least in the opinion of some,—namely—that it can be deemed cogent by those only who do not deny the *reality* of Space. Accordingly, it will form a material feature in a subsequent section of this Manual, to insist upon the Reality of Space, and to point out, beyond what I have done on a former occasion, the fallacious reasoning of the opponents of that reality. On account of the objection against the "*Demonstration,*" now adverted to, (although it is certainly no objection in my opinion,) I conceive, our apprehension of the Laws of the Interlimitation of our Sensations, *inasmuch as these Laws com-*

prise very peculiar proofs of the Reality of Extension, must form a *requisite preparation* for the study of Dr. Clarke's Demonstration—*a priori*,—especially for those who would otherwise incline to deny the Reality of Space. At any rate, the object and force of the *So-called Argument—a priori*,—AS FAR *as that argument is* MANAGED *a priori*,—is only to prove the NECESSARY EXISTENCE AND INDEPENDENCE of the First Cause, without meddling with its *Intelligence*, and far less with its *Goodness*.

With regard, in the next place, to the Physical Theology founded in the Laws of Vision; it is undeniably of this farther extent, when compared with that of the So-called Argument a priori, that its general conclusions certainly comprehend not only the EXISTENCE, but *also the* INTELLIGENCE of the External Cause: Although, upon the other hand, it does not go to comprehend a proof of his ETERNAL OR NECESSARY existence. Beyond this, it is not only manifestly comprehended, in the analogy which we must infer between the nature of our own Mind and that of the External Living Being which actuates us, that he must be an INTELLIGENT—that is an INTELLECTUAL—Being; but, also, it is manifest that he is a MORAL Being: of which truth, our Pleasures and Pains of Exterior Sensation are a proof. It is, at the same time, to be granted that, the *Moral* Nature of the Deity is proved *only very limitedly and indefinitely* by the Laws of our Sensations. And more extensive and definite proofs of that Nature are certainly desirable.

Lastly, then, we approach to that *Natural* The-

ology which is built upon a moral consideration of the Laws and Dispensations of Providence—that is—the Laws and Economy of Nature,—as manifest in the whole discernable Universe. Upon the extent and merits of this Department of the Subject, it is neither relevant to Physical Theology, nor here intended, to enter: While it will not be supposed that its cogency, or importance, is here at all meant to be depreciated, since it is in THIS Department we are to seek for that PLENARY evidence of the Power, Wisdom, and Goodness of God, which neither the *Demonstration a priori*, nor *Physical* Theology as above laid down, can afford to us.

To complete this Demarcation of the Subjects in question, there is one consideration to be stated; which is of especial moment to Religionists:—namely—that *Physical* Theology, as founded in the Laws of our Sensations, by its exploding and proscribing for ever the prejudice and belief of Matter; *which prejudice and belief are* ADMITTED *both by the Demonstration of Clarke and by all* NATURAL *Theologists;* presents an insurmountable barrier against the attempts of Atheism. It is on THIS account that the Physical Argument is especially urged, for the consideration of all who are concerned: FOR, NEVER CAN A BELIEF OF A CREATION *of Substantive Matter* (that is *a bringing of Substance out of Nothing*) *exist in the mind* of a SOUND PHILOSOPHER, AS A PHILOSOPHICAL belief: *and,* NEVER CAN AN ATHEIST *exist, who does not believe in the existence of* SUBSTANTIVE MATTER.

The nature and limits of this work obviously forbid any enlargement on the subject, other than to prosecute its farther illustration in the next Section, by affording a popular illustration of the nature of the HUMAN mind.

SECTION THIRD.

1. OF OUR THINKING IN COLORS.—2. THIS FACT APPLIED TO FURNISH A POPULAR GENERAL CONCEPTION OF THE PHYSIOLOGICAL CONDITION OF MIND.

The Primary Phenomena of Vision,—that is to say our Sensations of Colors *together with their* Interlimitations,—possess an office in the Human Mind far more comprehensive, than that of their character in being the General Facts of our Immediate Visual Perception: For, in addition to this last mentioned character, they are the General Facts that are formative of the Indices, *or* Envelops, of *all our Thoughts whatever*, with some special and very limited exceptions: Or, in other words, with the limited exceptions just mentioned, it is a general fact of the Human Mind that we think in colors. The thing in question amounts in effect to this,—that, in a certain and a very important sense, the *Whole Universe of Human Thoughts is comprehended under the Laws of our Primary Visual Modifications.*

The fact which I thus introduce to the notice of pneumatological readers, and which I propose to enlarge upon as furnishing the means of a popular general conception of the Physiological Condition of the Mind, is a matter which can hardly have escaped the notice of any person, in the single

instances of its operation. But, by one of those oversights which have long obstructed the progress of pneumatological science, this fact has never been *generalised, or applied to the advancement of philosophy*. At the same time, the thing in question certainly does not owe its past neglect to any such subtilty (consisting perhaps in the very simplicity of its nature) as that which so long prevented the detection of the Laws which govern the Phenomena: For it is impossible that the process of our thinking in colors can have escaped *notice:* and, in every probability, the reason of its having escaped *application* has been its apparent want of utility. The fact of our thinking in Colors, indeed, how real and comprehensive soever it is, derives its philosophical importance chiefly from its being previously shown to be founded in the analytical Laws of our Visual Modifications, as laid down in the foregoing section. Accordingly, therefore, I have not entertained the subject (beyond merely hinting its existence) in any of my former publications; although it is *manifestly involved* in all that I have advanced upon the general subject. And I should have deemed it as promising only an incomplete efficacy to introduce it now, were it not from the fact of its being analytically bottomed upon the Laws in question: Without being founded on which sort of proof, the Author of any such Scheme as the Reideian Theory might despotically impute the whole matter to a mere "BIAS *of our* "*nature, originating in an early habit*;" as the Reideian Philosophers had long done with regard

to the fact of the *out-spread nature of color*, concerning which, an arbitrary denial was kept up until a fortunate accident led to that virtual recantation on the part of Professor Stewart, the documentary history of which is before the public.

As being preparatory to entering upon what may be called an INDUCTION of the fact first above suggested; the observations which are immediately to follow, and which may occupy three or four pages, are introduced for a reason which will be explained. They are, indeed, rather for the consideration of those who are somewhat more conversant on the subject, than for that of the general or uninitiated reader. But they are so brief, that they can hardly in any case demand an apology. And, in point of fact, they contain nothing that an ordinary capacity, and ordinary thinking, may not fully apprehend.

It is an assumption entertained by the almost universal consent of modern writers on the subject of general reasoning, and it is deemed by them as being a *necessary condition* of such reasoning, that we *think in Words or Language*. The knowledge of this fact, moreover, is considered as being a discovery of modern times; and it is esteemed as being one of the advances in logical science for which we are indebted to the Philosophers of the last century. Admitting, as I do, that the *fact exists as a result of inveterate habit*, and, indeed, a *habit grounded in what may be called a practical necessity;* without, at the same time, allowing that

it is founded in a necessity that is absolute; I dissent very widely from the import which these philosophers have attached to the phrase in question; and, on account of what is to follow here, I deem it requisite to describe what I apprehend to be the only import which can in reality be attached to the phrase—"*thinking in Language*,"—or to any other phrase employed on the subject with the same intention. My general views, with regard to this Subject, have been unfolded in the Chapter on the Ultimate Philosophy of Signs, in the concluding part of my Analysis of Language:[1] But it is sufficient, for the present occasion, to describe, in the following brief terms, the fact, as coinciding with those views.

From the beginning of our existence, our ideas of things are so continually associated with the names by which we have learned to signify them, and to hear them signified by, that at length the name will infallibly excite the idea to which it is annexed in our imagination, and, reciprocally, the idea, when it occurs, will as infallibly call up the the name; in each of which cases, alike, the *Name*

[1] With a reference to the just admirers of the DIVERSIONS OF PURLEY, I take this opportunity to say that, I have entitled that Analysis *Anti-Tooke*, not in any spirit of illiberal opposition; but in order to indicate not only how widely I diverge from the views of Mr. Tooke, (after admitting his position that all the parts of Speech are resolvable into the Noun and the Verb,) but also to mark the EPOCH, in the research after the Philosophy of Language, at which my own speculations on the subject had their origin.

and the *Idea* will CO-EXIST *in our conception*, neither of them having any power either to discharge or to absorb the other. This process, moreover, holds good as well in the case of *Classes* or *Generals*, as it does in those of Individual Objects. From this summary account of the process, therefore, it follows that we do not, *properly speaking*, think IN words or language. And I have shown at some length, in the work above referred to, that *a* NAME *never discharges the mind from thinking of the* THING *named*. The real fact, then, is that we think ONLY WITH OR ACCOMPANIED BY words or language, that is to say—*words are not analogous to envelops*, nor yet to *veils, or visors*, over the forms or faces (so to speak) of our collected masses of ideas: On the contrary, words are *only labels, or marks*, analogous to *tallies* attached to articles of goods or furniture; *which tallies we view at the same time* that we do the goods, or thoughts, to which they are *attached*, without either sinking or confounding the one in the other. In my earlier speculations on general reasoning, I gave into the doctrine of the Nominalists to a considerable extent, it appearing to me to be so rational when contrasted with the scheme either of Realism or of Conceptualism. But, even then, I was struck by what I conceived to be a large defect in the tenets of Nominalism. And, since then, having had time to scrutinise the subject, I have been led to adopt that view of it which has been delineated in my Analysis of Language, under the distinctive name of *Pluralism*. I have noticed the fact, here, as a due caution, or

qualification; or, indeed, *as a wide dissent rather;* whenever it may, for any purpose, be affirmed that we think in Language; by which phrase the Nominalists design to *merge every idea of a Class or Number of Individuals,* into the *Essence of its Name.*

In case it should be objected, that the phraseology of the Writers alluded to does not justify the imputing to them the doctrine of our *thinking* IN *colors,* as I have expressed it: As, for example, "In treating of Abstraction," (says Professor Stewart) "I endeavoured to show that we *think,* as well "as speak, by means of words."—And again:—'While I was engaged,' (says Lavoisier) 'in the 'composition of my Elements of Chemistry, I per-'ceived better than I had ever done before, that 'we think only through the medium of words.'—If such passages as these, I say, should be interpreted as contradicting the doctrine which I have imputed to these Writers; I reply, without any fear of being confuted, that the doctrine of the Nominalists *resolves itself into* the phrase which I have employed above to characterise it.

As a test of this, exhibited in *one of the fruits* of that doctrine in the department of Language; we find, Mr. Tooke, in his DIVERSIONS OF PURLEY, (page 37) condemns his favorite, Locke, in the following terms:—"He would not have talked of the "*composition of ideas;* but would have seen that it "was merely a contrivance of language: and that "the only composition was in *terms;* and conse-"quently that it was as improper to speak of a

"*complex idea*, as it would be to call a constellation "a complex star."—Such is the account given of our *Ideas, or of the Operations of the Human Mind*, by the *most approved Philosophical Grammarian* which the world has seen,—an account resulting entirely from his having subscribed to the doctrine of Nominalism. This criticism on the doctrine of Mr. Tooke, in his profess capacity of a Pneumatologist, must be admitted to be very far from being unimportant to the general subject of the Philosophy of Mind.

As a farther confirmation of my assertion, that the apparent salvo contained in the words—"*through the medium of*"—means nothing; I remark that, in Professor Stewart's expression of the doctrine in question, he announces the fact as being *only collateral to another general fact still more obvious*—namely—that we "*speak* BY MEANS OF "*words*." The criticism which I feel under the necessity to offer upon this expression of Mr. Stewart, (at the same time that it must curiously bear out my present view of the doctrine of Nominalism,) cannot be without effect in rousing the attention of such readers, as are but little in the subject, to the absurdities which occasionally lurk in the sustained periods of that distinguished Writer; in whose language, any more than in whose opinions, they could not expect to find them. As for the fact of the matter, then, I apprehend that Mr. Stewart's assertion, that we "*speak* BY MEANS "OF *words*," amounts to an absurdity perfectly parallel to an assertion that we *think* BY MEANS OF

thoughts: For, in the name of common sense, *What is speaking*, but *wording?* Here, therefore, we have a notable instance of a *sacrifice of philosophical truth*, for the sake of substituting sonorous nonsense to please the ear: For, it will not for a moment be believed that Professor Stewart would *defend* his assertion that *words* are a MEANS of *speech:* whereas, if his language be taken for an *expression of the fact*, as every reader is forced to take it if he knows no better, it follows that *words* and *speaking* are *two different things.* How little could readers of the Philosophy of the Mind expect that the truth of the subject should ever be sacrificed, by a Writer of such eminence, to a mere parade of verbiage? It is conclusive, however, that the words—"*through the medium or* "*means of*"—amount to sound, without sense, in the case in question.

It was necessary, on the present occasion, to furnish the foregoing criticism on the doctrine of our *thinking in words*, for the sake of pointing out, in the beginning here, that *it is in a very different sense*, from that above described, that I express myself when I suggest the fact of our *thinking in colors.* For, although the two different processes in question are so far analogous that in each of them, alike, we have a *double object*,—that is to say *Two Collateral Objects*—of thought in the Mind at once, which different objects we never confound; yet, it remains to be pointed out, that the two objects, in the case of our thinking in colors, are

connected together in a very different manner, from that in which we connect a Name, *or any External Sign,* with our Ideas of Classes of Objects. But I proceed, now, to a statement or description of the fact of our thinking in colors.

The General Fact in question is only *One Species* of a fact still more general,—namely—that we *think of each and every one of those Concrete Masses of Attributes* that are the *assumed Prototypes of our Complex Ideas,* UNDER SOME SORT OF ENVELOP, OR VISOR, OF SENSATION; *or, else,* under Some Envelop, or Visor, of IDEA *of Sensation.*

The proposition just expressed, it is obvious, can hold true with regard *only to the two most intelligent species,* of those Sensations which we undergo from impressions upon the five external organs of sense. And herein, also, our Sensations of COLORS possess so immeasurably the advantage, in the comprehensiveness, as well as in the accuracy, of the information they convey, that no individual of our species, except only those who are denied the use of sight, can ever forego the inveterate habit of thinking of the Objects of *all the other* senses, even of those of *Touch itself,* under an Envelop, or Visor, of COLOR, unless in some special cases which need not here be adverted to, any farther than to observe that if we, in any case, employ the medium of any other sense, instead of that of sight, the *very same general law must hold good*—namely—that we always *think of Every Object of thought* under SOME SORT OF VEIL, OR VISOR, OF SENSATION, OR OF IDEA *of Sensation.* For the reason just as-

signed, I shall proceed to illustrate the general fact in question *in the department of* COLORS ONLY. And my present design is to show that the species of Sensations, or of Ideas, just mentioned, is *not only a Set of Signs of the Objects of* TOUCH,—(*Signs, however, in a most different sense from that in which Dr. Reid and his followers assert them to be Signs of those Objects,*) but, at the same time, are *Signs of All our Complex Masses of Thought, both Sensual and Intellectual,*—being, in the most obvious or literal sense of the term, no other than ACTUAL APPARENT ENVELOPS of those masses.

Thus, Every thing we see,—every thing we read of,—every thing we remember,—affords us an example of the truth of the fact. Every thing which the Poet can imagine, or the Philosopher conceive, of the past, the present, or the future, furnishes but an additional instance of it. If we look out on the scenery of the country,—the show of the town,—or the display of the heavens,—*including all the imagined unseen attributes which we ascribe to the individual* objects they contain ; every object *appears to us as being* ENVELOPED BY, *or at least as* RESIDING IMMEDIATELY BEHIND, A VISOR OR VEIL, of SOME COLOR, *either uniform or varied ;* and we *contemplate, or think of,* each of those objects as being *thus masked, or enclosed.* Mankind travel over the diversified face of the earth's four quarters,—traverse its mountains and its valleys,—explore its caverns,—survey its temples,—and measure, or climb, its pyramids ;—and, then, return home to relate, or reflect on, what they have SEEN,

perhaps without their having ever once extended a finger with intent to make any one of those things an object of their TOUCH. In the course of their travel, men may indeed, to a certain extent, have touched any one, or even all, of the objects in question; and this not only through necessity, or mere accident, but also through *design:* But, whensoever they have done this, they have *nevertheless afterwards thought* of these objects under an *ideal envelop of colors:* And, even, *while in the very act of perceiving* them by their TOUCH, they have *only very rarely contemplated* them as being objects of *any other sense* than that of COLOR. For example here, (it may be asked,) What *Philosopher* ever thought of *fingering* the wonders of Palmyra, or Persepolis? Or What *Clown* ever set himself to *thumb* St. Peter's, or St. Paul's?

The same general fact holds manifestly true when, instead of contemplating the *inanimate* objects of nature, we either perceive or think of objects in which *Mind, or Intellect,* with all its imagined variety of attributes, makes a part. We always contemplate, or think of, ALL THE OTHER SUPPOSED ATTRIBUTES *of a man,* under the COLORS *of a man;* and, of *all the other supposed* ATTRIBUTES *of a Horse,* under the COLORS *of a Horse;—always including, along with colors, in such case, those* OUTLINES which the MEETINGS BETWEEN our Sensations of various colors in the mind CREATE *for the time being;* WHICH OUTLINES we call by the name of VISIBLE FIGURE; and which Figures appear to the vulgar, and even to the Philosopher when not

philosophising, to exist *without and at a distance from them.* Thus, when reading their histories, respectively, we view, or think of, *the ambition and the clemency* of Cæsar, as *enveloped by some imagined colors and figure* of Cæsar;—the *cruelty* of Nero, under some imagined *colors and figure* of Nero;—and the *wrath,* the *strength,* and the *swiftness,* of Achilles, under some imagined *colors and figure* of Achilles.

In a word; all the remembered objects of time past;—all the Universe of presently-existing things and passing events;—and all the conceptions of things in futurity; are equally depicted in our imagination or phantasy *under some imagined envelop, or Visor, of* COLORS, *limited by some figure:*—EACH OBJECT, *or event, being, by means of a* VARIETY *in the Colors,* PARTED OFF (*from all the others* that are contemplated at the same time,) *by a limit which* WE CONSIDER *as being appropriately its own;* although the Laws of Vision show us that every such line is ONLY A LINE COMMON—that is it is A MEETING—BETWEEN *some two* colors. If, for example, we begin with the earliest of all histories; we have immediately called up in our mind *some imagined colored picture* of Adam and of Eve; and of the beauties of that favored region in which they were originally placed. And, every character, and event, and country, of all the subsequent histories which we ever contemplate, *including all the imagined invisible attributes of all these characters, events,* and *countries,* are *inevitably depicted in our mind in some imagined colors and figures,* upon one same general principle.

In by far the greater number of these cases, indeed, it is to be admitted that the instantaneous idea or visor of colors called up is, according to circumstances, less or more *faint and vague;* insomuch that any person, if asked, could hardly say *which colors* he imagines for the dress of Cæsar, or of Alexander, when reading his history. But it is beyond dispute that this faintness, or vagueness, forms no impeachment of the fact.

Nor is the general fact limited, even, to the bounds of *visible* creation: For the Chemical Philosopher, while he is following out the results of his experiments upon the component elements of bodies, *finds himself obliged to imagine* (*so far as imagination can reach,*) SOME PICTORIAL ASPECT for those *elements.* He very well knows, indeed, that these atoms, or parts, must defy all his endeavours to imagine either their size, or their shape. But size, and shape, he is convinced they must have: And he is confident that, if they were large enough to be visible, these elements must occasion in his mind *Sensations of colors, together with figures,* analogous to those occasioned by large, and ordinary objects; And, hence, the vain endeavours of his phantasy are incontinently set in action, to depict them in his sensations.

If any one were disposed to question this fact, let him only consider the attempts of Philosophers to furnish us with conceptions of the *primary elements of body,* such as those of supposing them to consist of "*indivisible atoms;*"—of "*hooks and eyes;*"—of "*spheres of attraction and repulsion;*"—and other such fancies, false, or true. The whole his-

tory of these several attempts proves that the MIND IS, IN A PHYSIOLOGICAL SENSE, AN ORGAN: *which Organ will, and must, in all cases, attempt to operate under One Same General Law of* CONCEIVING OF EVERY OBJECT UNDER AN ENVELOP, *or at least* BEHIND A VEIL, OF SENSATIONS OF COLORS; or, *else,* under that of *Some Other Species of Sensation;* even when to effect its purpose is impossible.

What, then, is the great deduction, to be drawn from the General Law above upon the whole described? It is this other general fact—namely—*that,* in the case of all persons endowed with sight, *the* JUDGING AND REASONING POWER, of the *Perceiving or Thinking Mind,* PERCEIVES, (*as often as it does perceive;*) and THINKS, (*as often as it does think;*) IN AND FROM SOME STATION, OR POINT, OF INTERNEITY *in the Mind,* when the SURFACE of the Mind is *imbued* with ILLUMINED SENSATIONS, OR IDEAS, CALLED COLORS; *which illuminations* are universally acknowledged, by philosophers, to be *purely modifications, or states,* of the thinking Mind itself. And, hence, it follows that, Every Mass of Assumed Concrete Attributes, which we ever contemplate under an envelop of colors, or of ideas of color, as making up ONE OBJECT of thought, such, for example, as a *man,* a *tree,* a *city,* or a *planet,* is *contemplated by the* JUDGING POWER of the Mind in a manner very similar to that in which we should contemplate a Painting, or Picture, on the Stained Window of a Church, if WE *were placed* IN THE DARK, WITHIN

the church; and LIGHT fell upon the Church Windows, FROM WITHOUT.

In a paper which I contemplate furnishing, upon some occasion, on our Notion of SUBSTANCE; in which I propose to insist farther upon that view of the subject which I hazarded in my First Lines, and in which I have contended (against a prevailing belief of the contrary,) for our having a POSITIVE knowledge of our own Substantive existence; I shall have occasion to argue, upon ground entirely collateral to that above-mentioned, and from evidences whose nature is undeniably no less than that of mathematical demonstration, that the Judging or Rationative Principle within us is *certainly* RESIDENT IN A CENTRAL POSITION in the Mind. But the argument contained in the description above given is all-sufficient for the purpose at present in view.

It follows, then, from this account of the Physiological Condition of the Mind, that our sensations of colors perform a *two-fold office*, or *two different offices*. They are, at one and the same time, ENVELOPS, *or* VISORS, behind which (*taken along with their* INTERLIMITATIONS,) we, in imagination, view every complex object of our Intellect *as it were enclosed within a proper skin;* every which object is thus *rendered conspicuous, by having a color appropriately its own:* And, they are also, at the same time, LABELS OR MARKS *of our Ideas, in the same sense that the* NAMES *of things are* LABELS *or* MARKS of these ideas. And, hereupon, it is very material to point out the following distinction—

namely—that, WHEREAS NAMES ARE ONLY ARTIFICIAL AND ARBITRARY labels or marks of our Ideas of things; (that is they are *marks* ONLY INVENTED AND CONVENTIONAL, *and which the mind* MIGHT EXIST WITHOUT HAVING, and the *want of which is the actual and natural condition of the Mere Animal Tribes* of living things;) Sensations or Ideas OF COLORS, on the contrary, are NATURAL AND UNCHANGEABLE labels, at the same time that they are *much more than this*, because they ENCLOSE, *and* THUS DEFINE THE IDEAL LIMITS of, the *Composite Concrete Objects of our Thoughts*, including all their ideal attributes, of whatever kind. Thus, for example, the NAME—*Horse*—calls up in us ONLY A RECOLLECTION of a horse, *without this Name's being the most distant likeness, or natural ideal envelop*, of the qualities, corporeal and mental, of that animal: But the COLORS, which arise in the mind when we *look at* a horse; or, the IDEAS of *those colors* which we contemplate when we *only think of* a horse; each of these vehicles forms an ACTUAL NATURAL IDEAL ENVELOP, OR VISOR, *under which we view*, and *must* view, *his strength, his swiftness, his patience, his courage, and all his other supposed unseen attributes.*

Precision on the subject demands I should explain, here, with the view to a popular apprehension of the fact, *upon what principle* the term *envelop,—visor,—veil,*—or *mask,*—is employed in the foregoing and following statements, and employed, too, with a manifest preference for the *first-mentioned* of these names; while it is evident that,

strictly speaking, *color must invariably, at* ANY ONE view, or thought of, an object, present itself to our apprehension *as a mere* VEIL *only*, and *never as a* COMPLETE ENVELOP, of the attributes comprehended under it. The principle, then, upon which I have shown this preference, is a fact which will be manifest the moment it is suggested—namely—that, although no external object can ever present to our sight *more than one side at a time;* and though, consequently, we can on that occasion, or upon any occasion whatever, never undergo any sensation of color that is *more of the involving nature of an envelop or skin* (of an object) than that of a *mere veil, or mask*, which hides it; yet, we know, from universal experience, that, were we to survey any external object on *every side*, (as we should do, for example, by *the act of walking round* a man, or a horse,) we should, as the result of such a *series of experiments*, uniformly discern that this, and every other such object, is APPARENTLY, AS TO OUR CONCEPTION OF IT, AS COMPLETELY SURROUNDED by Color, as if it were any assemblage of things *enclosed in a* BAG: And, hence, it follows, as an invariable general law of our intellectual nature, that, although we can never either perceive or think of a man, or a horse, *except as being* BEHIND A SCREEN OR VISOR *of color* excited by that *ideal side of him which our phantasy presents as being next to us;* yet, to this ideal screen, the *understanding*, from memory, *superadds a conception of the color, or veil*, AS A THING EXTENDING ALL ROUND AND TOTALLY ENCLOSING HIM. In this way—*that is*

under some COMPLETE ENVELOP *of Color*—we CONCEIVE of a *white man,* or a *gray horse,* or any other external object; which external object, all the while, *has and can have, in itself, no color at all,*—color being nothing but a phantasm in a mind, called up by some unknown action of light reflected from an external object; or, otherwise, by some nervous stimulus of the sight, occasioned by some action of our body.

In fine: The simile which has now been suggested, by which, the condition, the procedure, and the *station or position,* of the Perceiving and Thinking Power of the Mind, has been compared to those of a person situated in a darkened church; who perceives colored pictures, demarked upon its windows in consequence of those windows being illumined by light from without; is meant here to serve, with some approach to truth, in preference to any of those other similes which have, at different times, been furnished by Philosophers for the same purpose, such, for example, as the *Cave and the Shadows* of Plato;—the *Seal and the Wax* of Aristotle;—the *Dark Chamber* of Locke;—or the *Reflecting Mirror* of Leibnitz:—each of which similes, I here of course suppose, must be viewed as being at once both loose and fallacious, in a very great degree; and each of them affording, in some degree, *an index of the quantity of defect* of the conceptions in which the views of its Author were founded.

In so far, however, as concerns Perception by

the medium of the TOUCH, the analogy entertained by Aristotle (and which he, in all probability, derived from a much earlier authority,) may be retained as holding, I think, a parallel pretension, to truth, to that which I have here claimed for the Pictures of Vision: And the *Seal and the Wax*, in the case of the one Sense; and the *Illumined Windows of the Darkened church, perceived from within*, in the other; may be insisted upon, as being respectively approximations to the real fact in nature, sufficiently close to serve for analogies that are truly scientific;—always remembering that they are, *in part*, ONLY ANALOGIES; *although they are also, in part*, SIMILITUDES,—especially *the latter in so far as regards the superficial extension and figures* of our sensations.

As for the Creed of our "*Seeing all things in the* "*Ideas of the Divine* Mind," entertained by Malebranche; and which the venerable Dr. Parr, in one of his Letters, has supposed to be coincident with my view of the Subject; I must seize this occasion to repeat, that my foregoing view of the physiological condition of the Mind, which coincides altogether with the deduced result of the Laws of Primary Vision, *differs as widely*, on the one hand, from the assumption of our *seeing either the Divine Ideas, or yet of our perceiving Any Thing beyond the Modifications of* OUR OWN MINDS; as it does, upon the other, from Berkeley's assumption of *detached, permanent, substantive ideas, that flit, like birds, into, and out of, the mind.* To this explanation, I have to add that, I am unable to decide in

my own opinion, whether the Ancient Hindoo Tenet on the subject is to be interpreted as coinciding with the view of Malebranche, or with that which I entertain. But I suspect that the Modern Hindoos, or at least the European Commentators on that Tenet, receive it in the meaning of Malebranche: while, however, I have already said, I am inclined to conjecture that the *Founders* of the Tenet arrived at it by the same road which I have followed in the Subject—namely—by having previously fallen upon the Laws of Vision.—It would be a curious reflection, if the truth of the matter, were it known, would oblige us to compare the Human Intellect, in its progress, to the Ant; which climbs up a wall with a grain of corn in its grasp, and many times drops its precious burden to the bottom; which it as often resumes, and re-ascends to a *lesser*, or a *greater height*. If the fact really was as I have conjectured, (the historical evidence of which, however, is now lost to mankind,) that the Ancient Hindoo Theology was founded upon those same Three, or Four self-evident Propositions in question; What a lesson does it afford to us, to contemplate the number of ages during which the Philosophers of Asia, and of Europe, have been plunged in the most profound darkness on this subject: through the whole course of which, the Human Intellect, like a grovelling animal, incapable of raising itself above burrowing in earth, has *continually embedded itself in a belief of a Universe of* BRUTE MATTER; and has wandered into every one of those chimerical regions of the phantasy

which I have enumerated above, as being the DIFFERENT THEORIES OF PERCEPTION hitherto exhibited to the world!

2.

By the General Fact of our Thinking in Colors; and by the *coincidence, or specific identity rather*, of this General Fact with those Laws of Vision which constitute the *strict analytical proof of every particular instance of it;* the Science of Pneumatology is BROUGHT BACK, from those supposed sublime, but really visionary and bottomless, conceits which, during almost a century, have arbitrarily denied to all our Sensations *any resemblance* to the Figures, or the Extension, of the External Bodies which our reason informs us are the Physical Causes that excite them: And this Science is thus shown to have its real foundation in truths which may be *illustrated and brought home to popular apprehension*, and this with some approach to strict precision, by PHYSICAL ANALOGIES displayed to our understandings in the most ordinary objects. And thus, that method of illustrating the Operations of the Mind with which such Geniuses as those of Plato, of Aristotle, and of Locke, had been fain to toy; which Leibnitz also chose to fondle, and at which Newton was not offended; but which have been, with a high hand, held up to ineffable derision by the School of Reid; are found worthy, and requisite, to be employed and cherished, *under fit*

modifications, as a method of philosophising which we must believe can never in future be in any danger of being superceded.

It remains, then, only to introduce here the consideration of a certain ANALOGY, OR PARALLEL, which exists between the *General Laws of* MIND (as now insisted upon) and those *General Laws of* BODY *which constitute the Science of Physics.* From a suggestion of this parallel, or correspondency, a person who has any tincture at all of reading on the subject may derive a very clear and comprehensive conception of the state of the Science of Mind, as induced by the fact of our Thinking in Colors.

1.—As the *First* stage of this parallel, therefore, I observe that the Visible Universe, *including all its unperceived supposed attributes,* considered by us *as residing behind a Veil of Color,* (or, else, behind a *Glove of Touch,*) including its *Varieties and Inter-limitations, is no other than the One Same Identical Object* which employs *the contemplation of the Natural Philosopher.* In other words; the physical inquirer contemplates all the imagined substances and changes in nature, including all their unperceived supposed attributes, as existing, and going on, behind Veils of Color: and thus, the *assumed-external Objects* of human thought form One and the Same Identical Universe of things, to the PNEUMATOLOGIST, and to the NATURAL PHILOSOPHER. The only difference, then, between the office of the Pneumatologist, and that of the Natural Philosopher, in any ordinary general view of this Universe, is that the *Former* regards all the

things which he *actually perceives* as being *nothing but his own thoughts;* which thoughts he considers as serving in the instrumental capacity of *Visors,* or *Gloves,* existing between his Judging Faculty and the External Unperceived Things of a Universe which his reason informs him exists, but which he knows he *cannot perceive:* Whereas the *Latter, illusively,* considers these *Veils,* or *Gloves,* formed of his own Sensations, *as being themselves the External Things of the Universe;* and, thus, he *actually investigates, and experiments upon, his* OWN MODIFICATIONS OR THOUGHTS, under the mistaken belief that they are the IDENTICAL MODES AND CHANGES OF EXTERNAL BODIES. Thus, EACH of the parties in question has a *double object, or rather two very different objects,* of his INTELLECTUAL CONTEMPLATION—namely—an *Envelop of Color,* (or else of *Touch,*) and a *Concrete Mass of Imagined Attributes* composing a *So-called Body* which that Envelop of Color, or of Touch, comprehends: But, the Natural Philosopher, (as well as the Vulgar,) considers the *Colors, or Touches,* as well as the Attributes contained under them, as being things *external;* whereas the Pneumatologist, (while reasoning as such,) remembers that *Color, or Touch, is only in the Mind;* while he admits that the supposed Attributes, which these Sensations veil, reside in Bodies that are unperceived and external.

It is a striking and a conclusive illustration of this fact to notice that, the Optician, when he is experimenting in what he calls a decomposition of LIGHT with a prism, *is in reality, as far as his per-*

ception goes, or the objects of such perception are concerned, DOING NO SUCH THING; but, on the contrary, he is ONLY DECOMPOSING HIS OWN SENSATIONS: Although this Natural Philosopher, just like any ordinary person, herein imposes upon himself by an illusion, which he would instantly acknowledge if questioned in the character of a Pneumatologist. For it is a fact, too notorious to admit of a moment's denial, that the EXTERNAL effect of a prism is only to decompose UNPERCEIVED LIGHT, WHICH *decomposition we* NEVER PERCEIVE, and *could* NEVER KNOW *except through a collection of reason:* While the *perceived* effect of the prism is only a *decomposition of our own Sensations of Colors;* that is—the use of a prism occasions in us *a composite, but divided, Sensation made up of the several primary colors,* whereas, if no prism had been employed, we should, *from the same external light,* have had excited in us a *Uniform Sensation of white.* After the statement of this well-known fact, Who would believe that a Writer on the subject, with a view to cry down every modification of Idealism, has, if I mistake not, exultingly put the question, and this question echoed by others; *Whether we can decompose our thoughts with a prism?* Such, however, is the force of prejudice on the subject: And such the extent of profound oversight, which has passed current for truth with regard to it.

Upon this point it can hardly be necessary to add that the School of Reid, and every other School of Pneumatologists, rests the whole subject

upon the fact that those beautiful phantasms, which *seem to us to adhere to a wall* in consequence of light having passed through a prism, are no other than Sensations—i. e. Thoughts—in our Mind. And it is a manifest truth that, the whole enterprise of Dr. Reid intended only to deny that the INTERLIMITATIONS perceived by us between these Sensations are interlimitations of *these Sensations themselves;* and to affirm that the *limitations or lines in question* are the IDENTICAL OUTLINES OF EXTERNAL BODIES, *such as those of the Houses, the Men, and the Trees* of the external world. How, then, has it happened, even to those who have drunk in the fallacies of the Reideian Scheme, that any one of them could possibly fall into such a shutting of the eyes against fact, as to make an object of his derision of the truth that the Optician decomposes his own Thoughts every time he makes use of a prism? This, one should think, could have happened only from a sense, that an admission of the fact must be tantamount to an explosion of the Reideian Theory.

Late, then, as it now is to retrace our way from such illusions; Let it henceforth be duly recognised by Pneumatologists, (*because denied it is impossible it can be,*) that, not only the Optician, but equally the Astronomer, the Chymist, and every other Experimentalist, together with every Artisan, and *every other Human Being*, is continually employed upon WITNESSING; AND WITNESSING NOTHING EXTERNAL TO; the composing, and the decomposing, of his own Sensations: while it is altogether to

be admitted, and held in view, that *corresponding processes of composition and decomposition* are going on *in bodies, externally and unperceived.* (See note B.) And it has already been shown that, with certain special and very limited cases of exception, the Sensations *so excited, and operated upon, are those of* COLORS, to the exclusion of all consideration of our accompanying exterior sensations of other senses.

I take occasion to advert, here, to the fact that Professor Stewart has complained, in his Dissertation, of having met with some persons, not deficient in reason, who could by no means be made to conceive colors to be in their minds, or, to *detach* these phenomena, in their imagination, from the external objects to which the vulgar conceive them to be coverings. This fact, however, is not surprising, in the case of some individuals, when we consider *how inapt most* persons are to give themselves the trouble *to study the process, even for a few moments:* (although such study, if pursued but for a few minutes, could hardly fail to carry conviction to any individual of tolerable capacity :) while it is certain that the illusion in question, until it be explained, is most profound; and doubtless was by the beneficence of the Supreme Being intended to be so.

On the occasion referred to, Mr. Stewart has morever quoted, with great approbation, M. D'Alembert's expression of wonder, in the case of colors,—"to see the Mind transport its sensations "out of itself, and to spread them as it were, over

"a substance to which they cannot possibly be-
"long." I advert to this quotation for an important purpose. And, *first*, for my own part, I am entirely of the opposite opinion from M. D'Alembert, and think it would be a wonder,—and even a miracle,—if any person, except a Pneumatologist, could possibly do other than, in his belief, attach his Sensations of Colors to External Objects. It would be quite as little wonderful, if a clown, on first witnessing a scenic representation in a theatre, were without any teaching to feel convinced that the canvas before him is *in reality one flat surface*, and *not an assemblage of objects having depth*, as a *room*, a *town*, or a *garden;* the various Figures of which, he must believe, occupy various distances from his eye. But, *secondly*, it is important here to note that the *real wonder*, which forms the theme of D'Alembert's admiration, is *explained* in a preceding part of the passage, which quotes that Writer to say—"The bias we ac-
"quire in consequence of habits acquired in
"infancy, to refer to a substance material and
"divisible, what really belongs to a substance
"spiritual and simple, is a thing well worthy of
"the attention of metaphysicians." Now, as I presume it is impossible for a moment to doubt that the gratuitous and arbitrary assumption of the SIMPLICITY OF THE MIND, so long kept up by one Sect of Pneumatologists, is laid for ever at rest by the Laws of the Interlimitations of our Sensations of Colors; the only reply which need be made, to *any reiteration of this visionary simplicity*

of the mind, is to state the fact that the *mind entertains, in one same surface of sensations of color, many millions of co-existent elementary sensations*—namely —MILLIONS OF SENSIBLE POINTS OF COLOR; every one of which sensible points possesses a locality so distinct from that of its neighbours, that we *might have it alone* in the mind: And, then, to desire of any competent person to *mark the extent of absurdity of attempting to combine* the ASSUMPTION OF THE SIMPLICITY *of the Mind,* with the fact of its being modified by millions of sensations at once!

To this consideration, however, we may add the following one. The *notion of simplicity* is one of the most *perfect* which the human mind can conceive. It is mathematically perfect, because it is no other than the notion of a mathematical point, whose mere definition excludes all composition, and compared with which the *most simple mode of extension is really complex.* Now,[1] Let any of the advocates of a *Simple* Mind afford us *some supposition, (no matter how visionary or unreal,)* of the MANNER in which such a mind *could sustain millions of elementary modifications at once,* and *endless millions of them in succession:* and, when he does this, I shall deem his assumption worthy of being reasoned with. But it is a truth, as self-evident as any axiom in geometry, that a *Simple Mind* (if it existed) must, like a mathematical point, REMAIN FOR EVER UNMODIFIED BY ANY PRESENT VARIETY OF THOUGHTS; or, yet, BY ANY CHANGE.

2. The *Second* stage of that parallel, the First of

which has just been concluded, possesses a very different character from that above described. In the Science of PHYSICS, in which all the changes that have been discerned and accounted for have been found to arise from some modification of one, or more, of Three Principles—namely—*Attraction, Repulsion,* and *Inertia* (for we need not here introduce any consideration of the *Atoms which form the Subjects* of the above mentioned Three Powers, or Attributes,) if we either observe, or perform any experiment upon, any untried Substance, or upon any change which it may undergo, it will be found to afford only a *particular example of the General Laws or Principles in question.* In a way, then, corresponding with the fact just mentioned, although not in a way analogous to it in any other respect, I observe that, if we take any particular case or example of our THINKING IN COLORS, and submit this example to analysis; we shall find that it furnishes *only a particular example of the operations of the Laws of Primary Vision,* as laid down in my different statements of that Subject. In point of fact, therefore, it is here manifest, without the aid of any additional illustration, that the Laws of Vision possess an office *in one sense corresponding to;* and, in the case of the *Perceived Universe of our own Thoughts or Mind, commensurate with;* that which the Laws of Attraction, Repulsion, and Inertia, possess in the *External Universe of Bodies.*

To those readers, indeed, who have given attention to the Laws of Vision, and who are at all in

the subject, there cannot exist a moment's doubt with regard to the fact which I have just suggested. Those Four General Facts, which constitute the Laws of Vision, are so manifestly the laws FORMATIVE of the INDICES, *or* ENVELOPS, *under some one other of which, all our Perceptions, Remembrances, and Imaginations, of objects and events, in the course of our thinking in colors, must be comprehended;* that it can require nothing more than the bare description of the fact to establish it beyond a cavil. And thus, *considered as Pneumatological Laws or those of Mental Phenomena, the Four General facts in question possess a* CORRESPONDENT EXTENSIVENESS *in the Science of* MIND, *to that of the Mechanical Laws of* BODY *in Natural Philosophy.*

In order to prevent any misapprehension, or confusion, of the two subjects, however, it is requisite to point out some distinctions and limitations which affect each of the above mentioned Codes. And, in so doing, it will be shown that, in the present state of our knowledge, each of these Codes derives some dignity over the other one, either with regard to its comprehensiveness, or to its stability; although a time may perhaps come, when there may be found more equality between the two, in point of stability, than is at present manifest. It is evident, then, in the first place, that the Laws of Vision are not so comprehensive in the Phenomena and Changes of Mind, as the Laws of Attraction, Repulsion, and Inertia, are in the Changes of Body; because the Pheno-

mena of Vision, including all the returns of these Phenomena in the modes of Memory and of Imagination, do not constitute all, or nearly all, the changes of thought which the Mind undergoes; as, for example, our more internal sensations, in all their various species, are not phenomena or changes of *Vision*, nor are they comprehended under its laws. By the general fact of our *thinking in Colors*, however, all the *internal*, as well as all the external, sensations of our minds are, *in a certain sense, comprehended under* the Laws of Vision; although it is obviously granted here, in what went before, that these Laws comprehend our Passions and Internal Feelings in *no other sense* than that in which a BAG may be said to comprehend an assemblage of any distinct articles, which it at any time envelops.

Another difference, between the two Codes in question, consists in this—namely—that, while we always *suppose a connection of causality* between Objects which we find to be *concomitants under Physical Laws;* we, on the other hand, *cannot discern any connection of causality, but only a mere concomitancy*, between any instance of the *Laws of Vision* and any supposed *attributes of things that are called up in our conception at the same time.* As, for example, when either the perception or the remembrance of the face, or figure, of a friend calls up the *other* attributes we ascribe to that friend; or, by a process reciprocal with this, when, upon *reading the history* of *Alexander*, our Phantasy supplies us with *a faint picture* of him; in either of

these cases, alike, we cannot suppose the *cause of the concomitancy* to be analogous to that of One Body's moving upon being impelled by another, or, by a body's gravitation to the earth; and all we know is that the concomitancy *is as inevitably certain* in the one case, as it is in the other, whensoever we try any experiment with a due regard to the fact.

But, to make up for *any lesser comprehensiveness* of this Province of the Laws of Vision, when compared as above mentioned with the Laws of Body, we have here to claim for the former *an undeniable superiority of their kind.* The fact is that, whereas the Laws of Body, or as they are called the Laws of Nature, are *merely contingent general facts for the time being*, and whose *cessation is certainly conceivable;* the Laws of Vision, on the contrary, are *not only facts for the time being*, but their *mutability, or cessation, is inconceivable;* they are in truth Mathematical Laws, although they at the same time present to us a System of *Real Efficiency* in the Operations of Nature—namely—in those of Visual Perception, and, of course, in those of Tactual Perception also. Now, therefore, as it is manifest that the Laws of Vision, and of Touch, are as truly *Laws of our Nature*, as any of the other General Facts which possess that title; it follows that, a large proportion of the Laws of Nature are here proved to be NOT CONTINGENT laws: And this certain truth opens our eyes to a consideration, or rather to a question, concerning a collateral subject—namely—*as to how far it is true*, as is uni-

formly assumed by Philosophers, that the MECHANICAL LAWS OF BODY *are* ENTIRELY CONTINGENT *facts*, which, for aught we know, may be *mere arbitrary concomitancies?*

In order to afford a momentary light on the question now suggested; I observe that, it is a *contingent* event when we have two contrasted Sensations of colors together in our mind: But, *when we actually have* two such Sensations in the mind, it is then a *necessary result* that a *Line is formed, or rather is* CREATED, *and perceived* between them. Analogously to this, then, I say, it is a *contingent* event when one Body comes into apparent collision with another: And it is also, perhaps, a contingent fact, proceeding only from the Will of God, that each Body is *endowed with Inertia and Elasticity:* But if all these facts *actually happen to exist*, then, (looking analogically to the Laws of Vision,) it may be conjectured to be possible, (as indeed I apprehend is the *demonstrable* fact, although I cannot prosecute the subject in this place,) that it is a *necessary result* for the Bodies to move, *as they do move*, after collision.

The object of these last observations, however, is not to go farther into the question concerning the Laws of BODY: but is only to show that the Laws of Primary Vision, *by proving the existence of Real Efficiency in Nature;* which, it is to be observed, is denied by Mr. Hume *equally in the Phenomena of Body and of* MIND; open to us a *new and very wide field of research.* And One great general truth becomes evident, from what has

been insisted upon above,—a truth which I think is not at all adverted to by Philosophers—namely —that,—NECESSITY *grows out of* CONTINGENCY; although CONTINGENCY *cannot grow out of* NECESSITY.

SECTION FOURTH.

FIRST PRINCIPLES OF THE SCIENCE OF MIND.

SUBSECTION 1.

Of the Real Extension of Body and of Space, and of the manner in which the Mind apprehends these Realities, considered as the Subjects which form, in a most serious extent, the Foundation of the Philosophy of Mind.—Incidental consideration of Clarke's Argument for the Necessary Existence of God.

In entering upon the following subject, there is no consideration more important to be held up for the attention of all who would possess any thorough understanding of the Philosophy of Mind, than a legitimate and strict examination of the process and evidence by which the mind attains its conception of Extension, in its various principal modes. That *this point has been effected, to* ALL ORDINARY intents and purposes, by all those who have apprehended the Laws of our Mental Nature laid down in the First Section of this Manual, is a fact certain. But the Subject certainly admits; and, on account of notable occurrences in the Speculations of other Inquirers, it demands; that we should enter into the scrutiny of a *Varied Modifi-*

cation of the Principles laid down. In other words; and to accommodate the Subject to all classes of readers, by speaking in a figure which fortunately happens to bear a close analogy to the Two Modes in question; *that Ground* of the Physiology of Mind which we may be said to have already PLOUGHED by our act of apprehending the Laws of Vision, admits of a farther process of analysis, by our intellect, in a way which may be called being HARROWED. And, accordingly, the following statements, and crucial reasonings on the Subject, make up an essential part of that knowledge of it which I desire to promulgate in the present publication, especially with a view to such readers as do not require to stop their investigations of the Subject at the close of its initiatory stage. The farther analytical process here alluded to, however, will not be entered into, in its details, in the first instance. But a knowledge of its nature and reality will be gathered in the course of reasoning, as we proceed.

The Philosophers of that School, to which my own speculations on the subject stand principally opposed, are altogether agreed with me as to the primary importance of this part of Pneumatological Science: Although they have not, (especially until the late remarkable concession on the subject by Professor Stewart,) been agreed with me with regard to the *nature* of this importance, or with respect to the *nature of the evidence* by which we acquire the conception of Extension, or of Space;

or, yet, with regard to the *consequences to be deduced* from the manner of that acquisition. To their readers in general it is known, that Dr. Reid and Professor Stewart have employed their conception of the manner in which we gain our Notion of Extension, to serve as an *experimentum crucis* for the establishment of two most important positions in philosophy, (whether both, or either, of those positions shall be admitted, or denied,)—namely—for the *confutation or explosion of the Ideal Theory, in all its Various Modifications;* and for the *proof of the reality of our knowledge.* While, upon the other hand, I proceed here on the design of showing, from various strictures upon certain particular parts of their speculations, in illustration of what I presume has been established on former occasions against their doctrine in general,—namely—that the *real history of our Notion of Extension is altogether incompatible with the assumption of the School of Reid with regard to it;* and that, the process, and evidence, by which we attain this Notion, are pregnant with consequences equally momentous in themselves and foreign to what was ever contemplated by that School. It follows, however, according to BOTH the schemes in question, that the inquiry concerning our Notion of Extension is of the very first importance to those who would attain a thorough knowledge of the Science of Mind. And it is material to inculcate strongly, here, that no attention must be wanting in the process of discussion, to any of the phases of the subject, by any one who would study this science

with effect; nor, indeed, by those who would rightly apprehend various *other* Sciences, which to an ordinary observer may appear to have very little dependence upon, or connexion with, this one.

As a farther preparatory notice with regard to the subject; it is requisite to observe, in this place, that an assumption has sprung up, of a comparatively very modern date in the history of Philosophy, *that there exists a profound mystery over the* ORIGIN *of our notion of Extension.* This assumption of mystery, which, it is manifest, could never have had an existence until the Philosopher DES CARTES, by a piece of pneumatological conjuration so clumsy and contemptible as would not at this day be tolerated by the auditory of any one above the degree of a charlatan, *ejected our ideas* (*of* COLORS, *and of their* EXTENSION,) *from their residence in the* MIND, *and assigned to them the* BRAIN *for their tenement*, was embraced by the Reideian School; and has been sedulously worked up, by it, into a vast imaginary importance, which makes a great figure in its writings: Whereas, I proceed upon ground established with conclusive reference to the concession of Mr. Stewart, as well as to the rationated proofs of the fact constituted by the Laws of Vision, that never was chimera more unfounded in nature than that which has been thus feigned; at the same time that no procedure could be more unfortunate for the interests of Philosophy, than that of adopting the GENERAL PRINCIPLE which gave rise to this pretension of mystery.

The General Principle, to which I now allude, was the assumption of Des Cartes, which has been extolled and acted upon by the School of Reid—namely—that the ESSENCE OF MIND CONSISTS IN THOUGHT;—an assumption which I would altogether assent to, and insist upon, if it were only taken to mean that we are to prosecute the Science of Pneumatology by ATTENDING EXCLUSIVELY *to the Phenomena and Properties of Thought;*—but which I am under the necessity to denounce, here, as deserving the utmost philosophical contempt when, in order to make way for this assumption,—(that is in order to assume that the *Essence of Mind consists in Thought Only*, as meant to contradistinguish the *Nature of Mind*, from that of *Matter* which Des Cartes assumed to consist in *Extension*,) its Author exhibited to the world the spectacle of *serving our Ideas*, (*of Color*, *&c.*) *with an ejectment from the mind.* In order to justify this expression of contempt, called forth for the very existence of the Subject, I need only put the question: Would any Immaterialist, in the present day, from the sanction of a Professor's Chair, insult the understandings of his audience by consigning our Ideas to a residence in the *Brain?* And yet, this was done, in the case of Des Cartes, by a Philosopher who was eminently an Immaterialist; and whom the Reideian School has estimated as being the *Founder of Modern Pneumatology!*

It was, doubtless, with a view to dissent from the above-mentioned assumption of Des Cartes;

which, we are to observe, went TO DENY TO MIND ANY NATURE AT ALL AS A SUBSTANCE OR SUBSTANTIVE THING; that the Philosopher Locke has expressed his notion that "*the perception of Ideas is* "*to the Soul,* what *motion is to the Body;*—NOT ITS "ESSENCE, BUT ONLY ONE OF ITS OPERATIONS." And it may safely be affirmed that this position of Locke, of itself alone, would have taken from Des Cartes the honor of being the Founder of Modern Pneumatology, had the Author of the Essay on Human Understanding never done more than assert this fundamental truth, in opposition, alike, to the *Visionary Essence* of Des Cartes, and to the *equally Visionary Detached Substantive Ideas* of other Theorists.

Here, therefore, I have particularly to enforce the consideration, that it is not against the Writers of the School of Reid, considered identically as individuals, that my speculations, at any time, are to be estimated as being levelled; but it is against the *fatuity of every Scheme which could possibly be devised to ideally-sublimise the nature of Mind, by claiming for it the attribute of* INEXTENSION,—a fatuity which has at all times arisen, in great part, from a fond and illusory belief that the property of inextension would contradistinguish the nature of Mind, from the *assumed corruptibility of Matter;* while, in reality, *this ideal sublimisation only carries Philosophy directly away in a contrary direction from the beautiful truth that All Supposed Matter is Mind.* At this stage of my philosophical pursuit, I cannot but look back upon the tenor of my opposition

to the fallacious bias in question, and upon the progressive evidences which have in the course of that pursuit been brought to condemn it, with the peculiar satisfaction which attends a conviction that a belief in the existence of Matter is a popular prejudice, so demonstrably fitted to be left only as an heirloom to the vulgar mass of mankind, that it cannot now prevent the establishment of the science in question.

To commence, then, the present investigation of the nature of our Notion of Extension; I observe, first, that Professor Stewart, together with his predecessor in Pneumatological doctrine, has fortunately sided with names to which I have always referred, as standing highest in my own conception of the subject, such as those of Locke, Clarke, Barrow, and Newton, not to enumerate here a host of other Intellects of the first order, (however they stand in opposition to a considerable array of Names of great pretension,) *on the primary and fundamental ground of the Real Extension both of Body and of Space.* The view which has been taken by the School of Reid of the *manner, or evidence,* by which we obtain the Notions of the Extension of Body and that of Space is, indeed, vastly different from that which results from the Laws of Primary Vision, upon which laws are founded those Consequences, and that Pneumatological Superstructure, upon which I all along insist. But, *concerning the fact itself of the reality of both* these essences, there is the most perfect

agreement between the courses of our respective speculations.

And here it is essential to take our stand upon the fact that, the *contrary assumption*, and more particularly that extreme degree of it which was entertained by Bishop BERKELEY, is one which is the most subversive of all the exercises and attributes of reason that is well possible to be imagined. Neither Science, nor Art, of any sort; nor Language, nor any system of Signs of Ideas; could exist,—we could not so much as give intelligibility to the Signs of any Science, or Art, or Action, generally speaking; WITHOUT THE PRE-SUPPOSITION OF EXTENSION (*together with that of* DURATION) as forming a NECESSARY THEATRE for the very existence of these things.—Without the pre-supposition of Extension and Duration, Action is impossible; and Language without import; and Reason without an object to employ itself upon. A Berkeleian, who, according to his creed, must either declare that he does *not in the least degree understand the import* of such words as *big* and *little*,—*up* and *down*,—*over* and *under*,—*before* and *after*,—*right side* and *left side*,—*contiguous*,—*far*,—*near*,—*at*,—*in*,—&c.; or, else, upon the other hand, confess that he understands these words in *some sense foreign to that in which all mankind in general apprehend them;* must, in the first of these cases, put himself absolutely out of the pale of ordinary understanding; or, in the second, must resort to such shifts, in order to account for his tenet, as are altogether astonishing to reason, and utterly

incomprehensible to his fellow creatures. How, for example, would it be possible to hold discourse with any man, who should assure us that he cannot conceive a mountain to be larger than the body of any insect which creeps along its base?

But, before we proceed farther, it is indispensable to insist upon not only the Real Extension of Body, in opposition to the Berkeleian Theory; but, also, upon the *Reality or Extension of Mere Absolute Space*, which I consider, in common with the School of Reid, as being the *Necessary Extended Matrix* which has received, or, rather has eternally contained, extended Body; and which Matrix we cannot conceive possible to be annihilated, even though we should suppose Body, or those manifested Energies of the Deity which we call Body, to be removed from it. It is indispensable that we should not leave this consideration behind us here, inasmuch as (it is too well-known) there unhappily subsists a great schism upon this fundamental point, between philosophers of the first eminence, and this with some approach to equipolency of opinions with regard to it:—Some, with Newton and his illustrious associates, maintaining the reality of the distinction in question;—while others, with Des Cartes and Leibnitz at their head, hold the opinion that there is NO REAL EXTERNAL SPACE *or* SPREAD IN NATURE, *except* the Spread or Extension of *So-called Matter or Body*,—a Schism with regard to which I have here to suggest a consideration, which I believe has not before been adverted to by Philosophers on either

side of the question,—namely—that, the denial of the Reality of Mere Absolute Space involves—*a priori*—no less a consequence than an inevitable and indisputable ATHEISM. This momentous consequence, I must observe, (at least if I should be found to be borne out by evidence of its truth,) has not been discerned by Professor Stewart, in the course of his philosophical investigations: And this oversight, therefore, happens incidentally to be the first which I have occasion to point out, in my present strictures on his writings. At the same time I remark that, the Atheistical consequence in question, if it follow from the premises, demands the more seriously to be adverted to, since some Philosophical Churchmen, of distinguished eminence, have sided; and others, without sufficient investigation, might be led to side; with the deniers of Absolute Space.

In his PHIL. ESSAYS, *Ess.* 2. *chap.* 2, Mr. Stewart says—"It is this circumstance" (he means the confounding of the notion of *hardness*, &c. with that of *extension*) "that will be found, on examination, to be the principal stumbling-block in the "Berkeleian Theory, and which distinguishes it "from that of the Hindoos and from all others "commonly classed along with it by metaphysicians, that it involved the annihilation of Space "as an external existence, thereby unhinging "completely the natural conceptions of the mind "with respect to a truth about which, above all "within the reach of our faculties, we seem to "be the most completely ascertained; and which

" accordingly was selected by Newton and Clarke, " as the ground-work of their argument for the " necessary existence of God."

As preparatory, therefore, to the objection to be laid here against Mr. Stewart's EXCLUSIVE stricture upon the creed of Berkeley; I must, in the first place, express my own *general* satisfaction of the solidity of the above-mentioned ground-work of the argument of Clarke and Newton: in the stability of which, also, I think, Professor Stewart himself has again concurred, in his latest publication. And I express my own judgment of the matter here the more especially, on account of the manifestations of dissent from it which have appeared; which, I must affirm, have had no effect in shaking my conviction with regard to the " *ground*-work."

I proceed, then, to state my humble opinion that the creed of Berkeley, although it appears more revolting to our natural reason at first sight, *is not in reality more pregnant with evil consequence*, in sweeping away the foundation of Clarke's argument, than is to be charged against the Leibnitzian denial of Mere Absolute Space. It becomes unavoidable, therefore, that I should enter in some degree into the merits of this suggestion. In the course of so doing, if any reader should find the few pages, which must be occupied by so serious a matter, too dull for his amusement; or if, from general reading, he shall have taken up a supposition that the subject has been exhausted, or is in itself insuperable; I may, from previous experience,

venture to assure him that he will lose his time in reading any such matters, if his object be to attain any valuable depth, either in Pneumatology or in Metaphysics whatever. At the same time, I would suggest, to every reader who may require it, what I humbly conceive to be a clue, which cannot lead him wrong in fixing his judgment on this subject; and which I consider as being *necessarily preparatory to his future course through the various topics of metaphysical speculation;* which is, to observe that the Notions, with regard to Extension of Body and that of Space, upon which I propose to insist, are those which are *common* to the PHILOSOPHER NEWTON *and to the great mass of mankind:* While the opposed assumptions, which I would here show to be fallacious and chimerical, are those of some PHILOSOPHERS ONLY,—assumptions built out of *scholastic or other extraordinary* views of the Subject. From this simple suggestion, therefore, every reader may draw this certain inference—namely—that he *shall not need to tax his capacity,* in order to find out any thing either *occult or difficult,* in the course of discussion: And all that he has to do, if he be possessed of any capacity, is to examine fairly *whether the arguments set up by the extraordinary deniers of Space* have any pretension, to shake the ordinary conception of men in general. I would, of course, commend this clue, to be employed not merely upon the present occasion, wherein the intended discussion will be very brief, but also on the occasion of reading *all* that has been written, by myself and by other writers, on the subject.

As an additional and especial reason for my prosecuting the subject here, I am obliged to observe, what I have shown on a former occasion, namely, that Dr. Reid, in his treatment of the nature of Space, has not been either so correct, so consistent, or yet in general so profound, as I think might have been expected from his powers, considering that he took his stand on the right side of the question. And, together with this fact, I am not aware that the deniers of Space have been at all met, with any thing like that strength of argument which the subject in reality affords against their fallacy.

Trusting, therefore, that the question demands no greater incitement, to insure our present consideration, than an attention to what has been advanced above; I proceed to observe, *First* that, If, according to the assumption of Des Cartes, *Matter be supposed to exist and to be infinitely extended;* in this case, the *Extension of Matter* must stand in the mind of a Cartesian, upon the very same footing of *necessary existence* as that which *Absolute Space* possesses in the mind of a Newtonian. The result of this consequence, then, without farther argument, is that of a *sheer and invincible Atheism:* because, by it we assume that *Matter—Brute Matter*—neither was created, nor is annihilable; since it is certain that, the moment the mind admits the Existence, or Conception, of an Infinite Expanse, whether it be assumed as as being Space, or Matter, it becomes impossible to conceive the Universe ever to have been without it.

But, *Secondly*,—If, according to Leibnitz and the greater number of Philosophers on that side of the question, we suppose *Matter to exist*, but to exist in *only a finite extent;* it follows that the denial of *Space beyond that extent* is not only an absurdity revolting to the natural conceptions of mankind in general; but, more than this, it leads to as complete an Atheism as that condemned above: because it follows from it that, *before finite Matter existed or was created*, there was *no extended Space or Matrix, to admit the possibility of its creation*. There cannot, I think, be a doubt, therefore, that the LEIBNITZIAN doctrine of the Subject leads to consequences as appalling, as those which I have ascribed to the CARTESIAN, or which Mr. Stewart has imputed EXCLUSIVELY to the BERKELEIAN creed.

As a single proof of this; I may remark that *physical action and force, involving motion*, are attributes which must be deemed *essential to Body*, whether Body be supposed to be Matter, or Mind: And, therefore, the *principal reason* of Clarke—namely—the "SUFFICIENT REASON"—*why Body should begin* to move in any one direction, rather than in another, is taken away by the assumption that ABSOLUTE SPACE—*the necessary Matrix for the possibility of Motion—has* NO EXISTENCE.

As a *supposed remedy*, for the evil now objected to, Archbishop King, (who advocates the doctrine of Leibnitz,) asserts that God "*created Space*," when he *created Body*. And he affirms that, we cannot conceive God not to be; and yet, we can

conceive Space not to be. At the same time, we are to observe that, Archbishop King did *not believe Extension to be a Mere Idea void of real expanse,* as was held by Berkeley; On the contrary, he confidently upholds Extension as a *real, though a created and therefore an annihilable* thing. Now, I must confess, I could quite as soon, and perhaps sooner, go the whole length with Berkeley, and deny the reality or expanse of Extension altogether, than believe it capable of either annihilation or creation, *after my having once acquired the conception of it:* For, to conceive the nature of Space, at all, is to me to be convinced of its necessary existence. I am obliged to own, that I cannot in the least, (though with every endeavour to that effect,) agree with the *general tenor* of reasoning of Archbishop King on the subject: into whose view of it I have looked again, very recently, for the present purpose; enriched, as it is, with the notes and reasonings of his learned Commentator, and by quotations from Leibnitz and other Oppugners of Space. Although, no one can be more deeply imbued, than I am, with a conviction of the Necessary Existence of God.

And here, to the conviction which I have already expressed of the solidity of the *ground* of Clarke's argument, it is important to add that his argument is equally valid, and equally suitable to the purpose, whether it be taken along with an assumption of the existence of Brute Matter, which however I conceive has been most conclusively exploded; or, taken along with the proofs, as I

altogether esteem them to be, that all Body is Mind. At the same time, it is to be taken along with this last, or rather it is a consequence of it, that I acknowledge myself to be, in *one* sense of the term, a CARTESIAN,—that is to say, in *affirming the Infinity of Body*, and therefore in *denying a Vacuum*. In other words; upon the ground of Clarke and Newton's argument, I feel bound to affirm a PLENUM OF THE SPIRIT OF GOD IN INFINITE SPACE: which consequence, I think, Newton himself would not for a moment have denied, if it had been put to him. When, therefore, we at any time speak of VOID OR MERE Space, we can do so *only hypothetically for the sake of argument*, and not as any voidance of Space that can *exist*: Although it is, at the same time, certain that *our original conception* of Space, and of its *necessary existence*, does not involve a conception of the existence of the Deity; or that of *Any Mind or Substance whatever:* And a conception of the Deity *can only be attained by us when we arrive at a mature exercise of reason*; and, then, we can attain it only as a conclusion, deduced from a *set Demonstration laid out and apprehended*. Hence, the human conception of the *Necessity of Space is certainly prior in the time;* and, as certainly, is *not inferior in evidence;* to the human conception of the Necessity of ANY BEING that can occupy it. In proof of this, I observe that the whole argument of Clarke is grounded upon an assumed fact—namely—"SOMETHING NOW IS:"—And there is no repugnance, to reason, to suppose ourselves

annihilated; and that NOTHING NOW IS, *in so far as we know, except Space whose annihilation we cannot conceive after having once conceived its existence.* But if we suppose *Nothing to exist now;* we then have nothing to imply, or indicate, a CAUSE of any existence; and, hence, *nothing except necessary Space is in such case at all supposable.* And, on the other hand, if we affirm that "SOMETHING *now is*" —*that is some extended body—whether Spirit or Matter;*—I then ask; How could this have been possible *without the presupposition of Space, in which to find room for its existence?*

It is here to be distinguished, that the *presupposition,* now insisted upon, is a *presupposition not in time, but only in the order of our ideas.* For it follows, from the argument of Clarke, that the FIRST CAUSE never had a beginning, any more than that Absolute Space which Clarke has demonstrated that it fills. And it also follows, collaterally, from those proofs which I have labored to set forth of the truth that all Body is Mind, that *Body never had a beginning,* or, in other words, that there NEVER WAS A CREATION *in the Vulgar Sense of that term:* Which eternal existence of Body, I fully confess, is my own settled belief on the subject, in result of my whole course of speculation; because, I cannot suppose a time when the *Energies of the Deity—(which is all that I mean by the word Body)* were unexerted. The term FIRST CAUSE in the argument of Clarke, and the word BODY in my own speculations as just referred to, mean One and the Same Thing—namely—the

ACTING SPIRIT OF GOD. And the Creation, or Universe, I take to be the ACTIONS of his Spirit, in those Modifications which we call PHYSICAL FACTS.

It is of moment to distinguish, here, that it does not follow from this last inference that SPACE *and* BODY are *One Same Thing or Essence.* On the contrary, the very *presumption* of Space, which, after it enters into our conception, cannot be conceived but as existing really and indestructably, and prior in the order of our ideas to all other things, (*Duration excepted,*) and existing thus *without the possibility of being moved;* while Body or the Exertion of Energies may be supposed *either to move,* or to *subside altogether and arise in another part of Space;* makes the Subjects in question *two Different Entities:* Which plain distinction the Ordinary Man never confounds; and the Philosopher who admits Motion never can confound without great absurdity. But it follows, nevertheless, from what I have laid down with regard to it, that Space is, *in a certain sense,* a SUBSTANCE; and that, in *this* sense, it is the Substance of the Infinite Mind, as Clarke, though under great dubiety or vacillation, *and in a sense different from that which I entertain,* has called it. As for my own notion of it; I conceive Absolute Space is the *Necessary Stance, i. e.* MATRIX, *for the possibility of* the Existence of ANY OTHER *Substance or Thing that can occupy or fill it:* Although, unless we can *do away with the assumption of Motion of Body in the process of all physical action,* we cannot

esteem MERE SPACE to be the ESSENTIAL *Substance of Body or Spirit;* which last sort of Substance we cannot recognise except as a Being essentially endowed with ACTIVITY, and this activity, in all probability, *never altogether unenergised in some way or other.* I propose, indeed, to insist farther, in a paper appropriately on Substance, that Mere Space is a Substance in the sense above suggested. And in this view of the subject I differ from Dr. Clarke, who, I think, rather preferably esteems Space to be a MODE of the Substance or Essence of the Deity: While, if the reality of motion of Body be admitted, I must insist that Infinite Space is a DISTINCT SHEATH which is filled with the Divine Essence,—together with the Finite Minds that are comprehended in it.

From what has been advanced in the foregoing pages, it becomes manifest, How great is the need that the Schism between Philosophers concerning the real existence of Space should be brought to a satisfactory conclusion. With a view to this desideratum, therefore, I devoted a Chapter to Space in my First Lines: the notice of which, in this place, obviates the necessity of my saying any farther with regard to it on the present occasion, except to advert to a consideration which, from sheer oversight, had escaped my attention of meeting it in the work just referred to. The matter, to which I now allude, is a denial which has been set up of the existence of Space upon the usual LOGICAL RULE FOR THE CONVERSION OF

PROPOSITIONS. And it appears to me that I have left little wanting, in point of substantial argument, which I could have desired to urge in the view which I took of the nature of Space in my First Lines, except only that of showing the palpable absurdity, or glaring mistake rather, of that supposed objection. I shall therefore consider the matter in this place. And I advert to it the more especially because of the nature of the Work in which it appears; whose selections on the subject are more likely to be consulted by a large class of readers, than the appropriate channels of original writers with regard to it.

"It has been urged" (says the author of the objection,) "that Space must be something more "than the absence of matter; because if nothing "be between bodies, such as the walls of a room, "they must necessarily touch. But surely it is "not *self-evident* that bodies must necessarily touch "if nothing be between them; nor of the truth "of this proposition can any thing like a proof be "brought. It is indeed intuitively certain, that "things, when they are in contact, have nothing "between them; and hence, it has been rashly "inferred, that things, when they have nothing "between them, are in contact;" but this is an illegitimate conversion of the proposition.

I must interrupt the Writer at this point of his view of the subject, in order to express my simple conception that nothing could be more sound or rational than the conversion of the proposition in this passage so wonderfully condemned,—nothing

to me more "*self-evident*" than the fact that "bo-
"dies must necessarily touch if nothing be be-
"tween them :"—And I consider it to be, at one and the same time, a very melancholy and a very satisfactory fact, that the past denial of the existence of Space has been finally grounded, *as upon a critical test founded in categorial logic*, on reasoning so utterly destructive of itself, as that herein set up. But I now proceed with the passage ; which goes on to say—"*but this* is an illegitimate conver-
"sion of the proposition. Every logician knows
"that to convert," &c.—"We are taught by Aris-
"totle, and by common sense, that an universal
"affirmative can be converted only into a *particular*
"affirmative. Things when they are in contact
"have nothing between them is a *universal* affir-
"mative proposition; and therefore it can be
"converted only into the following *particular* affir-
"mative :—Some things, when they have nothing
"between them, are in contact,—a proposition
"which by no means includes in it the contact of
"the walls of an empty room."

ENCY. BRIT. *Third Ed. Metaphysics, Article* 183.

As the baneful denial of the existence of Absolute Space has certainly *no stronger* ground to rest upon, than that which is constituted by this above-quoted array of supposed Categorial Logic ; and, as I think no argument can possibly be more void of any claim to respect than this one, after it is once examined; I conceive nothing could be more desirable than that result, which must at

once appear to us, when we have put it to the test. What, then, is the real state of the question, *before we come to this test?* It is this—namely—that, if the accredited rules of the Aristotelian Logic are valid in this instance; *and,* IF *the present Oppugner of Space has* REASONED LEGITIMATELY *from these rules;* they do, by their intuitive force alone, without any evidence at all from our Perception or Judgment; or, rather, in the utter violation of our perception and judgment; ANNIHILATE SPACE, and *strike opposition dumb by the conclusiveness with which they do so.*

Are we, then, to sit down under the despair embodied in this fiat? Reason and Ridicule, alike, forbid it. The real fact of the matter is, that the proposition, *as converted above;* and which, in the hands of the Objecter to Space, has wrought such mischief; becomes, when legitimately taken, the *solid ground of a totally opposite result.* In a word; the proposition in question is NOT "a universal AFFIRMATIVE" proposition; NOR IS IT AN AFFIRMATIVE PROPOSITION AT ALL: On the contrary, it is a universal NEGATIVE proposition; and, as such, it legitimately admits of being converted into ANOTHER UNIVERSAL NEGATIVE. The mistake of the Author of the objection consists in this —namely—He assumes the word which is the *Sign of Negation, (i. e.* the word *Nothing)* to *serve for the Sign of Something, or of Anything:* and then, with this absurd assumption, he forms a *mock affirmative* universal proposition: Whereas, instead of employing the word "*Nothing,*" or putting the

proposition in the form he has done,—he ought to have said—Things, when they are in contact, have NOT ANY THING between them; which universal NEGATIVE proposition is legitimately convertible into *this other universal negative*—namely—Things, when they have *Any Thing* between, ARE NOT *in contact.*

In confirmation of this exposition, I hardly need observe that the negative, or the affirmative, sign, in any proposition, *must affect the copula:* And that, it is plain, the Author of the objection has been able to employ the affirmative term—"HAVE," (in his form of the proposition,) by no other means except by making it *couple* NEGATION *as a Predicate,* with a POSITIVE THING *as its Subject,*—an absurdity to the last degree manifest and glaring. Thus, then, the *Logic of the Conversion of Propositions,* in as far as ITS authority can have any weight or operation in this inquiry, conclusively affords its award to the reality of Space. And it is seriously to be hoped that the Schism, which has thus long subsisted in the philosophical world with regard to this Reality, must give way in every instance in which any future Philosopher shall set himself to examine the subject duly, and divested of prejudice.

As a single example of the reasoning of Archbishop King on the subject of Space, alluded to above, I shall quote the following passage. In page 37, of his Work—("ON THE ORIGIN OF EVIL,")—he denies the reality of Space,—and equally denies the *extension of mind,*—upon the assumption that

" if we but attend to our thoughts, and sensations,
" which have no relation to external things, or to
" quantity,"—" there will appear to be no more
" necessity for the existence of Space than of
" Matter."

Now, I humbly conceive, this assumption is precisely parallel to that of a man's shutting his eyes, in the streets of a large city full of Coaches and Vehicles of all sorts; and, then, believing that this act may be supposed to annihilate all the vehicles; and, consequently, that none of them can drive over him. Ludicrous as this supposition must appear; I seriously can find no difference, in point of reason, between the two assumptions. And, as for the *included and intolerable* assumption, in the above passage—namely—that "*our thoughts have no relation to quantity;*—it is, NOW, hardly deserving of an answer, unless on account of its most certain fallacy, since the Laws of Vision have reduced to rationated proof, (what almost all Philosophers in all ages had believed before,)—namely—that the ONLY QUANTITY, *whether continuous or discrete, which we* EVER PERCEIVE *are our own* SENSATIONS; and that, all those quantities which we CONCEIVE as being *external to us*, MUST HAVE REMAINED IMPOSSIBLE FOR US TO CONCEIVE *if we had not previously* PERCEIVED THEIR GENERA *in the* SENSATIONS *of which we have been conscious.*

In all the cases here last alluded to, of course it is manifest, from the foregoing reasonings, that *an act of Judgment or Understanding, upon the Sensations,* is essential in the process.

But, to return to Archbishop King: When he comes to treat of the existence of the Deity, in a subsequent chapter, he turns round upon himself, as will appear from the following expressions.—"Secondly, we are certain that this principle" (he means the DEITY) "is One, Similar, and "Uniform. For *Matter* is, as to its essence, "every where one and alike: the same must be "said of Space if we grant it to be any thing dis-"tinct from Matter: much more must the Cause, "which fills Space with Matter, be *One, Simple,* "and *Uniform.*"—Now, I observe, that this last reasoning is undeniable. But it follows from it that ANY CAUSE, which can FILL SPACE *with any thing,* MUST ITSELF FILL SPACE *if it be* ADMITTED *that* "NOTHING CAN ACT BUT WHERE IT IS." And here I must urge, that this objection is *ad hominem* against King; because the *pretence,* of some modern metaphysicians, since set up;—(but which I confidently hold to be a figment as contemptible as any fallacy in philosophy,)—namely—that things *may act where they are* NOT—had *not become an Idol* of metaphysical vagary in King's time.

This last-mentioned Chimera, of modern growth, seems indeed to demand an observation, or two, here, in the way of a caution to some readers. The real fact is, that, the *supposed nonreality of actual contact,* in Physics, can only be proved to amount to this —namely—that the *Centres,* of the parts of Supposed Matter, are *kept asunder by Spheres of Repulsion* forming these parts, respectively. Now, then, it remains to be asked; *What*

are these Spheres of Repulsion, but BULKS? And *since undeniably* THESE BULKS are admitted as coming into a STATE OF PROXIMITY WHICH BEARS ALL THE APPEARANCE OF REAL CONTACT; What is this but *actual contact of* BODY *with* BODY, as Body is now defined by our best Philosophers? I am prevented, by the nature of the present work, from entering into a subject which would decisively confirm this view of the thing in question: but I may merely hint, here, my opinion, that, *after we assume Elasticity in Body*, the fact of motion upon impulse becomes a *real secondary efficiency, strictly demonstrable* in the process of the *mutual repulsions* of these Bodies. And I am not deterred from avowing that I cannot find reason to think otherwise, notwithstanding all that has been said by Philosophers to the contrary of our knowledge of real efficiency; *which*, we are to observe, *includes a denial of Secondary* efficiency.

In fine. I entertain a sufficient trust that the Schism, which has heretofore subsisted concerning Space, must give way to a satisfactory general reunion among those Philosophers who shall come after us, without any dissent of a sufficient amount to disturb the Subject. It is not to be denied, indeed; and it must for the sake of the subject be held up to particular remark here; that this Schism, which lies deeper in Philosophy, and which more seriously arraigns the Capacity of the Human Understanding, for the attaining of certainty in its acquisition of *First Truths*, than any other about which it is inquisitive, has been left as a derelict,

and an opprobrium, by the leading Metaphysicians of this Country, for nearly the period of a century. During the long philosophical reign of the School of Reid, nothing has been effected towards its amelioration. That Philosopher, himself, has treated the subject only obtusely,—not to say superficially. And Professor Stewart has not appeared to deem it available to entertain it at all, except by brief and profitless allusions. Nor must we here fail to notice, as a very important consideration, adverted to in the outset of this paper, that, by attributing to the Theory of BERKELEY, *singly and exclusively*, the consequence of "taking "away the ground-work of Clarke and Newton's "Argument for the necessary existence of God," Mr. Stewart has (if my view of the subject be deemed tenable) unwittingly thrown a veil over a similar and equally-mischievous fallacy, in the Creed of those Philosophers who ADMIT THE EXTENSION OF BODY, *but* DENY THAT OF SPACE: And, that AN ATHEISM—*a priori—must equally follow the* BERKELEIAN, *the* CARTESIAN, *and the* LEIBNITZIAN creed.

There is one consideration, which it may be of service to suggest at the close of these statements. It appears to be generally overlooked, by the disputants on *both* sides of the subject, but it yet, perhaps, may operate upon many readers, as strongly as any that can be adduced: which is that, *whoever denies Space, must also deny Motion.* This consequence, I apprehend, follows equally from each of the three Creeds above-mentioned.

And yet, we find such distinguished Opponents of Space as Archbishop King and Bishop Law continually descanting upon MOTION, as if it were a thing altogether *compatible* with their Scheme. Bishop Berkeley, indeed, has preserved a consistency *at least*, in treating Motion, as well as Extension, as being nothing in External Nature, but only a Mere Idea in a Mind. But, in order to manifest the fallacy of the Writers first mentioned, as a self-evident truth, we have only to suppose Body to exist, and to be either Matter or Spirit, and either infinite or finite; In either of which cases, if its parts occasionally approach to, or recede from, one another, these *changes of distance* between the parts must have been impossible if the whole had not existed in a *Sheath which afforded room* for the motion of the parts.

In fine: I repeat here, in order that it may be duly looked to by Religionists, and by all concerned, that the denial of *Space*, in the sense of Leibnitz and of King, is as mischievous a fallacy, in taking away the ground of the proof *a priori* of the necessary existence of God, as the denial of the EXTENSION OF BODY in the sense of Berkeley is; which last has been exclusively arraigned by Professor Stewart, and held up by him as having peculiar philosophical consequences.

SUBSECTION 2.

1. *Of the Speculations of Professor Stewart concerning Extension.*—2. *Mr. Stewart's notice of Dr. Hutcheson's hint concerning our notion of Extension. Extension apprehended by the Mind by both Sense and Intellect.*—3. *Importance of this Double Evidence of the fact, to the Science of Pneumatology.*

1.

It has appeared, in the foregoing article, that such was the rational ground concerning the reality of Extension and of Space, upon which Professor Stewart had started in his philosophical course, that, it may be believed, had he not previously enthralled his understanding in the fallacious views of Reid; who had himself previously but half emancipated his understanding from the still more fallacious views of Berkeley; he would have taken a very different direction in philosophising, from that which he has actually exhibited to the world. The principal objections, therefore, which I at present propose to state against Mr. Stewart's doctrine of our Notions of Extension and of Space, are those that follow.

First. In point of enumeration, it is requisite to mention again, what has already been objected—namely—that, although he, in point of fact, generally admits the distinct reality of each of these

things, he has yet confounded them together in his allusion to the Berkeleian Theory, and has asserted Berkeley's denial of the real Extension of Body to be the ONLY doctrine of the subject that stands opposed to the *ground-work* of Clarke's argument.

Secondly. The assumption upon which Mr. Stewart in the main asserts the reality of the attribute called Extension—namely—that of "*the "natural conception of the mind,*" is *not argument, but is only mere assertion,* however true it may be in point of fact: because, a BERKELEIAN might employ the *very same expression,* to serve his own purpose, however untrue it would be in reality. And when, in order to make up for this defect in his view of the subject, we attend to what Mr. Stewart has advanced in the way of argument, in support of his assumption, the result, I think, is deplorable, and is *any thing but evidence* of the fact. The following several quotations will serve to evince the truth of this last remark. And it is important, here, to the advancement of the subject, to point out what is their tendency and amount.

In the First Volume of his Elements, Ed. 3. page 97. he says—"The history of our notions of "extension and figure is not altogether so obvious" (he means as those of colors, sounds, &c.) "and "accordingly it has been the subject of various "controversies." Again, in his Essays, in the conclusion of Ess. 2, he says—"That the idea of "*Time* might have been formed without any ideas "either of *extension* or of *motion* is sufficiently ob-"vious: but it is by no means equally clear

" whether the idea of *motion* presupposes that of " *extension*, or that of *extension* the idea of *motion*." In a Note (L), upon this last passage, he says—" I " intended to have introduced here some doubts " and queries with respect to the origin, or rather " to the history, of the notion of Extension; not " with any view to an explanation of a fact which " I consider, with the eminent philosophers referred " to in the text, as altogether unaccountable," &c. —" Whatever light can be thrown upon this very " obscure subject may be regarded as a valuable " accession to the natural history of the human " understanding."—He afterwards, in the same note says,—" I am strongly inclined, at the same " time, to think, that the idea of *Extension* involves " the idea of *motion;* or, to express myself more " explicitly, that our first notions of Extension are " acquired by the effort of moving the hands over " the surfaces of bodies, and by the effort of moving " our own bodies from place to place."—He nearly concludes the Note by saying that, he differs from Dr. Smith, and M. Destutt Tracy, and other inquirers, (who insist upon the *motion of the hand* in clearing up this mystery,) only in this—namely—" that, if true, it exhibits the problem in " a form still more manifestly insoluble than that " in which it is commonly viewed."

Now, with the opinion of Mr. Stewart here last quoted, I altogether agree—namely—that the supposed solution of the question by the *use of the hand*, or by *motion at all*, would involve the subject in the darkest cloud possible. But I ask, (and this

not without astonishment,) How has it been possible that the Writers in question, one after another, have gone on in stifling the strongest calls of reason by obstinately referring the origin of our notion of Extension to MOTION, or to the HAND; *while their* EYES *were open to behold* all the STATIONARY *extended Colors*, and Visible Figures, which they daily perceived? It becomes, I think, perfectly manifest, that an *inveterate prejudice* of these Writers, *against the Extension of our Sensations of Colors, and of Touch*, founded in their having previously yielded their reason to the Dogma of the *Simplicity of the Mind*, has been the Enchanter who hath wrought this delusion upon them. And the moment we refer to the Laws of Vision, (which demonstrate that field-extension and figure are Properties of our Sensations,) the illusion must be dispelled. It has already appeared, that the rationale which the Laws of Vision exhibit of the process of perception of Extension and Figure; (which process Professor Stewart, in the quotation here above given, had prematurely declared his confident belief to be "*insoluble;*") has since then received his own complete virtual assent: Which proceeding has left nothing on HIS part to be desired with regard to it. But here, nevertheless, as a popular consideration for every understanding, it may be asked, *even supposing that we had not* the rationale in question now to proceed upon, What Philosopher would have the hardihood to affirm that, if a man were fixed in a nich, from infancy to age; and were, for seventy years, to look around him, on

all the passing and stationary objects of his sight, such as Houses, Men, Trees, Horses, Carts, &c. he *could never in all that time, from his sight alone,* derive the notions of big, little, broad, long, high, low, lesser, greater, right-side, left-side, round, square, &c.? As for the conceits of BISHOP BERKELEY on the subject, so reprehended by Mr. Stewart, it is certain that HE *never attempted any such intolerable assertion as this:* He only affirmed, concerning our Sensations of Colors, ("New *Theory of Vision,*" *Prop.* 156.) that, though "It's true, "there be divers of them perceived at once; and "more of some, and less of others; accurately to "complete their Magnitudes, and assign precise "determinate proportions between things so va- "riable and inconstant, if we suppose it possible "to be done, must yet be a very trifling, and in- "significant labor." In another place he asks; "Is not the Extension we see coloured?"—It is manifest, therefore, from these quotations alone, that BERKELEY, *whom Dr. Reid has acknowledged to have been his* PHILOSOPHICAL FATHER *in this belief,* never dreamed that there was ANY MYSTERY over the ORIGIN of our notion of Extension.

It is indeed to be particularly insisted upon, in this place, agreeably with the passage just quoted, (because I conceive it is more than probable that a great mistake has prevailed among readers with regard to the fact,) that BERKELEY, notwithstanding his unfounded and mischievous assertion of a *specific difference between Visible* Figure and *Tangible, never denied the Extension of our Sensations*

of Color in so far as ANY THING IN THE UNIVERSE *is extended.* All that he denied was the REALITY *of Out-Spread, or Spread whatever;* or, in other words, he conceived the notion of OUT-SPREAD OR SPREAD to be an *illusion*, and *not a reality, both in* SIGHT *and in* TOUCH: And, of course, he equally supposed the EXTENDED CAUSE of our Sensations—namely—the INFINITE MIND—to be NOT SPREAD, *i. e.* as NOT *filling Infinite Space,* because he admits the existence of *No Such Thing* as *Real Space* to be filled. All which monstrous proceeding, we are to observe, followed from his having *commenced* his philosophical course with a determined prejudice of the *Simplicity of the Mind.*

Now, in opposition to, *and in express rebellion against*, this Paternal creed of Berkeley, we find Dr. Reid, *when he forsook* the Berkeleian Scheme and admitted the *reality of Spread or Expansion in* BODY, *intrepidly set up a denial of All Extension* of our Sensations of Color, and Touch, *whether real or illusory.* And, with regard to *Color,* he, if possible more intrepidly, made no scruple to *deny to it the office of so much as in any way occasioning, or suggesting*, our Notion of Figure, or Extension. In proof of this—(his well-known doctrine—) it can only be necessary for me to quote the following passage from his "INQUIRY." In *chap.* 5, *sect.* 5, of that Work, he says,—"it must on the other "hand be allowed, that if we had never felt" (FELT!) "any thing hard or soft, rough or smooth, "figured or moved, we should never have had a "conception of extension." It is indisputable,

then, that Dr. Reid, in the assumption just quoted, has placed himself in the situation of virtually affirming that a man, *by the use of his sight alone*, employed upon all the objects around him, from infancy to old age, *could never acquire any notion of either Broad*, or *Long*, or *Shape*, or *Spread*, or *Local Position whatever!* Can we think it will readily be believed, in after times, that any Philosopher (or we must say any two Philosophers,) in other respects much enlightened, and living in a very enlightened age, could have been brought, by any force of bias, to attempt the promulgation of so intolerable a proposition, as that which I have just shewn is imputable to Dr. Reid?

But, concerning the *fruits of bias* in the speculations of Dr. Reid, and concerning the *method of philosophising* pursued by his School, I must have occasion to speak more particularly in the sequel; especially, in the strictures which it will be requisite to offer upon the conversion of Dr. Reid, from the Berkeleian to his own Scheme. Here, however, when so much of the reality of the subject is at stake, it may not be more than duly cautious to insist that, it is impossible to deny the intention of Reid to exclude the Office of sight, in the case adverted to. To justify what I have now said; it is only requisite to add that, he continues the very passage in question as follows:— "so that as there is good ground to believe, that "the notion of extension could not be prior to "that of other *primary* qualities; so it is certain "that it could not be posterior to the notion of

" any of them, being necessarily implied in them " all."

It is matter for remark here, however, that although this is Reid's doctrine in his " INQUIRY ;" he afterwards, (in his Essays, Ess. 2. chap. 19,) completely *vacillates,* and assigns to Sight the office which he at first denied to it. Thus he says— " There are only two of our senses by which the " notion of space enters into the mind; to wit, " touch and sight." This observation, in the place last referred to, is a sound one: although the ground he had chosen involved him in inconsistency in making it. Among other merits, in that place, he expresses his dissent from a very erroneous doctrine of Berkeley, in the following words:— " When I use the names of tangible and visible " space, I do not mean to adopt Berkeley's opinion " so far as to think that they are really different " things, and altogether unlike. I take them to be " different conceptions of the same thing: the one " very partial, and the other more complete, but " both distinct and just as far as they reach." In this observation, Reid is certainly right: Of which, any ordinary person may be satisfied, without farther argument, by employing his Eye to trace out a square, a circle, or any other figure, upon a wall; in which process, he will find that the *Eye moves its direction in the very same manner that the Finger, or the Hand,* proceeds when a tangible square, or circle, is traced out.

I shall close these strictures by observing that, the School of Reid *most lamentably confounds the*

Science and Phenomena of PRIMARY Vision, with the *Science and Phenomena of* SECONDARY Vision; —than which, no Two Subjects can be more distinct, or different. In other words, that School assumes, and maintains, that ALL VISION—that is ALL ITS PHENOMENA—is a LANGUAGE, and NOTHING BUT a Language. Which assumption, I confidently affirm, with all its pretended evidences and consequences, is one great mass of the most *demonstrable, and demonstrated, fallacy.* I admit, with that School, that SECONDARY Vision is indeed a Language, signifying, to those who can interpret its Phenomena—namely—to all adult persons in general,—the magnitudes, the figures, the positions, and the distances, of such *Objects of Touch as are distant from us* beyond the immediate reach of Touch itself, but not beyond our *Sight:* Which magnitudes, figures, positions, and distances, in strict fact, *we do not perceive by* SIGHT *at all,* but perceive by an *instantaneous process of our judgment or understanding;* which judgment we have learned in time, as an *Art;* and could not perform in our early infancy. But PRIMARY *Vision, on the contrary, is* ITSELF A SPECIES OF TOUCH: And the objects it apprehends are *Real magnitudes* —namely—the *Real Magnitudes and Figures of our Sensations of Colors;* which Magnitudes are *nearly about equal to* (*for they are separate in place, and therefore are not identically the same things as,*) the Real Magnitudes of the *Impressions* of light on the *Fund of the Eye* during Vision. I repeat, therefore, on account of the vastness and the mischief of the

fallacy of the Reideian School, that the Phenomena of PRIMARY Vision are NOT A LANGUAGE: *They do* NOT *signify*, or even so much as *imply*, or *indicate*, or *suggest*, the existence of ANY OBJECT BEYOND THEM; not even so much as the existence of the impressions, or images, in the Nervous Retina of the Eye: although we *afterwards learn* to make them serve in the office of *supplying us with guesses*, (*which guesses are often most fallacious in fact*,) of the existence, &c. of objects external to our bodies.

In contrast with this great mistake of Reid, it is especially due to Berkeley to state here, that HE did not confound PRIMARY Vision, with *Secondary:* On the contrary, he made the due distinction between the Subjects: And, what is more, to him is due the honor of reducing the Phenomena of the *latter*, in some degree, to matter of science; although he did not hit upon the rationale, or means, of raising a Science of Primary Vision from its appropriate phenomena, owing (as it should seem) to that deceptive subtilty which has prevented men in all ages from discerning those Laws of the Interlimitation of our Sensations of Colors which absolutely CREATE Visible Figure or Out line: which subtilty betrayed Berkeley, no less than the vulgar mass of mankind, into the profound misconception that a *visible line must be a thing of* SOME COLOR,—" a *blue*, or a *red* line."

After what has been conceded on the part of Professor Stewart, in his taking up the Lockeian position laid down by Lord Monboddo; I may

leave it to every ingenuous person, Whether there can exist a doubt that the eyes of Mr. Stewart, towards the close of his life, were completely opened to the fact that all was lost, of this so much-celebrated doctrine of Reid which pretends that PRIMARY Vision, (*as well as Secondary,*) is a *Mere Language, consisting of Signs altogether unlike to the things signified:* Although, from the state of the subject in the public mind, it is manifest that the fact of Professor Stewart's conversion does *not do away the necessity of the present and following discussions.* The Philosophy of the School of Reid is not only interwoven, in its course, with much collateral true criticism; but it contains fundamental assumptions *so attractive to deluded human vanity,* that it might struggle hard for existence, at least in the minds of a considerable number of individuals, if it were, in however large an extent, only *scotched not killed* to the conviction of every person who may ever turn his mind, rationally, to this department of knowledge.

2.

In continuation, I observe that not only have the Speculations of the School of Reid left, as a matter proscribed, the whole subject of the Extension of our Sensual Modifications, together with all the *consequences* which result from the demonstration of their Extension: But, in the following example we have to mark a notable and a compli-

cated instance of vacillation on the part of Mr. Stewart; by which he retracts the doctrine of our gaining the Idea of Extension from the Sense of *Touch only*, or from *Touch together with Motion*.—The notice of this inconsistency, therefore, I shall introduce here, previously to showing another and more curious inconsistency in the procedure of Dr. Reid; by which he has exploded his own Theory, in admitting that our *Ideas measure Duration;* and previously, also, to my showing that the doctrine of Kant (which I conceive has been greatly misapprehended by Mr. Stewart,) is, *when divested of some manifest inconsistency,* altogether in unison with the view which is herein maintained.

In his *Philosophical Essays, Essay* 1. *Chap.* 3, Mr. Stewart, after having quoted Dr. Hutcheson to say that—'Extension, Figure, Motion, and 'Rest, seem to be more properly ideas accompany-'ing sensations of sight and touch, than sensations 'of either of those senses,'—goes on to observe that,—"The peculiarity which Hutcheson had the "merit of first remarking, with respect to our "ideas of extension, figure, and motion, might, "one should have thought, have led him to con-"jecture that Locke's principles, when applied to "some of the other objects of our knowledge, "would perhaps require an analogous latitude of "construction. But no hint of such a suspicion "occurs, as far as I recollect,—in any part of his "writings; nor does it appear that he was at all "aware of the importance of the criticism on which "he had stumbled. The fact, as I shall have

" occasion to show in another Essay, is he had " anticipated the very instances which were after- " wards appealed to by Reid, as furnishing an " *experimentum crucis* in support of his own reason- " ings against the ideal theory."

Now upon this passage I must observe, in the first place, that it contains not only a vacillation in doctrine; but, also, an incorrectness of reference: For, first, since Dr. Reid (as has been shewn,) expressly *denied to sight* the office of occasioning in us any notion of extension; he *could not consistently* have appealed to BOTH *Touch and Sight*, as an *experimentum crucis*, as Mr. Stewart here, by speaking in the plural number, loosely asserts him to have done. And, secondly, Mr. Stewart having here admitted, without exception or comment, the position of Hutcheson—namely—that the notion of extension accompanies sensations of *both* senses—namely—of Touch and of Color;—this certainly is a vacillation, and a very momentous one, from the *extreme* position of Reid: Nor can it be denied that it is a vacillation from the doctrine of Mr. Stewart himself; because he has quoted, with approbation, in his Philosophical Essays, (Essay 2. chap. 2. page 92) this extreme position of Reid —namely—that our Notion of Extension is acquired from *Touch* or *Feeling only*—that is from objects which we have " FELT,"—to the *exclusion of sight.*

Nor is this all: Because I must here insist upon yet another instance of vacillation in Mr. Stewart on the subject,—namely,—in his having, in the

last quotation, expressly sided with Hutcheson that the Notion of Extension accompanies *sensations of Sight and of Touch;* whereas, in a passage formerly here quoted, he says—"I am strongly "inclined to think that the idea of *Extension in-* "*volves the idea of Motion,* or, to express myself "more explicitly, that our first notions of exten- "sion are acquired by moving the hands over the "surfaces of bodies."

Now, if the above-quoted tissue of jumbling and inconsistent assertions were uttered by any *ordinary* person, talking on the subject; or, even, by any *Philosopher talking in ordinary discourse, apart from Philosophy;* it is certain, the confusion involved would not be worth commenting upon. But, that a *Philosopher, descanting upon the Subject as matter of Philosophy,* should evince such a notable shifting in the saddle of his argument, is undeniably a matter which becomes a momentous subject of criticism, since it affords indisputable *internal evidence* that his doctrine of the subject is no more clear, nor true, than it is fixed or invariable. And here it is beyond a cavil, that the assumption of the Idea of Extension's accompanying Sensations of *Feeling only;*—and, that again, of its accompanying Sensations *both of Feeling and of Sight;*—and, that other or third assumption, of its *requiring the additional instrumentality of* MOTION, of the hands, or of the body, to ascertain it; are THREE AS DIFFERENT CONCEPTIONS, in the mind of a Philosopher, at the moment of philosophising, as any three notions whatever.

As for the fact that some Writers on the Continent have fallen into the supposition of there being a mystery over the subject; I can only suppose that a desire to *sublimise* the mind and its operations, in the spirit of the Reideian School, has given rise to this chimera. And if the writings of that School should extend their influence abroad, as there is now some appearance of their doing; we shall, in such an event, have only to mark a repetition of the course before followed by the Writers of France, in the case of the Philosophy of Locke;—the untenable points of which they embraced, and founded speculations upon, many years after their fallacy was seen through in Britain. But it is far more important to insist here, as an antidote, or a caution on the subject, that no such sentiment of wonder, or mystery, with regard to its Origin was ever entertained by such thinkers as Des Cartes, Malebranche, Leibnitz, Newton, Locke, Clarke, Berkeley, or Hume, any more than by any of the Ancient Philosophers. In a word; *The whole pretended mystery* of the ORIGIN of our Notion of Extension is a CHIMERA; Which illusion has arisen about, or not long before, the time when Dr. Reid, forsaking the creed of Berkeley, conceived the attempt to deprive our sensations of Color and of Touch of those *most-surely-ascertained attributes which* BERKELEY HIMSELF, no less than all other Philosophers, has insisted upon their possessing. Nor could such an attempt as that of Reid end, (sooner or later,) in any other fate of demonstrated absurdity than it

has done: Although we must not confound or overlook a real distinction to be made here—namely—that it is a vastly different thing to observe *in gross*, with all mankind, the ORIGIN OR SENSUAL OCCASION of the idea of Extension, from that of being able to ANALYSE OR RESOLVE ANY VARICOLORED, OR UNICOLORED, Sensation *of Color* into its COLORED COMPARTMENTS AND LIMITS; or, in other words, to *reduce Perception to a Science, by demonstrating that our* JUDGMENT *co-operates with* SENSATION in this process, and by showing the MANNER HOW THEY DO thus co-operate.

SECONDLY.—To proceed, now therefore, to consider the Subject of Extension under a *more advanced aspect;* as has already just been hinted, I altogether agree that there is a *certain and a very frequent Modification* of the Idea of Extension, in which the Idea of Extension IS INDEED "*a notion* "*accompanying* Sensations of Sight, and Touch, "*rather than a mere sensation of either of these senses:*" —namely,—It is certain that *every perception or idea of extension that exceeds the magnitude of a sensible point,* either of Color or of Touch, is an idea NOT ENTIRELY *of Sense or mere Consciousness*, but is an idea or notion of the *Understanding*,—it being formed by our *discernment or judgment of the* CO-EXISTENCE OF MANY, OR SEVERAL, sensible points of Color, or of Touch, on the mind at any one time. This fact I have duly adverted to in my First Lines, as being preparatory to my treating the process of the perception of Figure or Outline:

In which place, I suggested that *any ordinary-sized* patch of color is not, as is generally supposed, A sensation,—that is *not a simple or single* sensation or object of *mere consciousness*;—but it is *an assemblage of many elementary sensations—i. e.* of *many sensible points of color*,—CO-EXISTING LOCALLY, SIDE BY SIDE ONE ANOTHER in the mind; *and is discerned by our Judgment as such.* But, in a striking opposition and contrast to this fact, it is in the highest degree evident that the School of Reid has *never interpreted the discovery of Hutcheson in* THIS manner; nor has it in the least admitted that we perceive any magnitude, or extension, *by any evidence that admits of being* ANALYSED, *or expressed by any species of* RATIONALE: And, hence, the attempt of that School to avail itself of the conception of Hutcheson was no other than an illusory act; and was fully as dark, if indeed it was not much more dark, than the conception in question was in the mind of Hutcheson himself. At the same time, it is undeniable, (either by reason or by sense,) that a *Sensible Point of Color* or "*Mini-*" *mum Visibile*," inasmuch as it is *larger than a mathematical* point, is an EXTENDED thing: And it follows clearly, from this, that our Sensations of Color, *even in their elementary points or singly taken*, are *extended* things, and are, in strict mathematical truth, NOT POINTS, *but* SURFACES; *although we cannot by* SENSE *divide them into* LESSER *surfaces.* Hence it results, undeniably, that we have a DOUBLE EVIDENCE *of the Extension of the Percipient Mind*;—namely—a CONSCIOUSNESS *of the super-*

ficial nature of each minute elementary Sensation, and an INTUITION or JUDGMENT of a CO-EXISTENCE *of many,* or rather of MILLIONS, *of these Elementary Surfaces* in the Mind every time we are modified by any Ordinary-sized Patch of Sensation of Color; And the same reference holds good, alike, in our Sensations of Touch.

It was to this Modification of the act of Perception — namely — the Modification in which SENSE *can no longer act,* as it does in the case of the Laws of Vision wherein it suffers a *co-existence of Varied Colors;* but in which INTELLECT ALONE takes up the process, by discerning that *One Unvaried Patch of* Sensation of Color is divisible into *Minute Elementary Sensations;* that I alluded at an earlier stage of this treatise: wherein I compared the intellectual process, now in question, to HARROWING; whereas the process in the Laws of Vision may be said to be analogous to PLOUGHING the phenomena.

3.

As a most important consideration, I have now to point out, that THE TWO-FOLD EVIDENCE *of the* EXTENSION OF THE PERCIPIENT SUBJECT OR MIND renders the truth of the Extension of the Mind the most certain, (if any truth can be more certain than *some* of those that are proved by *single* evidence) of any within the scope of our faculties to ascertain. And, when this double evidence of the matter is duly contrasted with the Views and

Arguments of Dr. Hutcheson and of the School of Reid with regard to the subject, I deem it may be of some moment, *as an evidence of consistency in speculation*, on a subject pregnant with such consequences, to adduce here the fact of my having, in my earliest speculations concerning it,—namely —in the Essay on Consciousness,—advanced *generically* the very same account of our acquisition of the idea of Extension by double evidence. In page 61 and following, of the work just mentioned, I have expressed such passages as these: which, as furnishing a contrast to the assumptions of the Writers already had in consideration, I think ought to be placed beside my subsequent and present reasonings on the subject:—"Extension is mani- "fested to us, (at any one visual impulse,) by two "different co-existent feelings. One of these is "already described, as being no other than *color* "*itself;* the other is a *consciousness* from *co-existent* "*conjoined impulses*, which sort of consciousness "(by inference) renders probable the extension of "the pressing light; but, by a *necessary* and "*stronger inference*, *certifies* the Extension of the "Percipient which so feels.—This ast mentioned "*co-feeling* from extended impulses is (as well as "color) a *primary* feeling, that is to say, we are as "truly *conscious* of the *co-existence* of *several* con- "sciousnesses, as we are of *one* consciousness. "For instance, upon suffering *black* and *white* "squares, when we look at a Chess board, we are "as conscious that we suffer *several colors*, as that "we suffer *one*." Here, nevertheless, it is to be

" observed that, the *suffering called color* and the " consciousness of *several co-existent similar suffer-* " *ings* are *two different sorts* of consciousness." [1]

" It is thus demonstrated that Extension is be- " trayed (at one impulse) in *two different* ways; " and this *peculiar complexness* of the evidence cer- " tifies the real existence of the quality of Exten- " sion, beyond any of those which have heretofore " been called *Qualities of Body*.—It at the same " time proves that, the *Extension of the Percipient* " is a *more necessary* inference, than that of Body."

Such as the above are the reasonings in a Work which Professor Stewart has acknowledged he had " *dipped into*:" But which, he signifies, he threw from him with a *resolve never to look into another page of my writings*. Let the competent reader therefore compare these passages, or contrast them, with Dr. Hutcheson's vague hint, and with Mr. Stewart's assumption of the *mysteriousness and insolubility* of the subject: and let him, upon this, pronounce ingenuously, whether he believes it was an *unmixed love of science* that made Mr. Stewart resolve to treat my earliest labors thus; with whatever defects, I am ready to acknowledge, they were otherwise mixed up. And here, I think, no

[1] The language, or import, of the above passages, I would now correct only by distinguishing that the word " *consciousness*" is therein sometimes improperly employed. Thus, instead of saying we are " conscious of the *co-existence of several* consciousnesses;" I would say, we are *certified, by our Intellectual Faculty or Judgment*, of the co-existence of several consciousnesses.

one can imagine that, at this moment, I have any other feeling than that of peculiar satisfaction in referring to this proceeding of Mr. Stewart; especially when I reflect on the circumstances in which I first presumed to indulge in, and to publish, any philosophical speculation.

Upon the present occasion, the Subject appears to demand that I should add the following remarks with regard to it. Mr. Stewart, indeed, on the occasion alluded to, was pleased to compliment me on the score of "genius," evinced in the work: But he expressed himself as being revolted at my *Hypothesis of a Spherule Mind.* In my reply to him, upon that point, be it observed, I freely acknowledged the mixed nature of the work: but, along with this, I pointed to the peculiar circumstances which gave rise to my speculating on the subject. After referring to this fact at present, therefore, as a matter which *might have excused* the Hypothesis in question, even if it had been to the last degree indefensible; I *now refuse to let it pass as condemned* by the light in which Mr. Stewart has viewed it: Although, I believe, no writer can be less charged with *feigning hypotheses* than myself, *on any occasion since that time.* Along with this, I must remark, that Professor Stewart himself has not refrained from acknowledging, in his *printed* writings, and of course in opposition to the spirit of his Letter to me, that there *have been some fortunate hypotheses* in Philosophy. And what I would now insist upon, in favor of the Spherule Hypothesis, is, *First*, the *fact* (since then reduced

to matter of rationated proof,)—namely—that the *Mind operates by a* SURFACE. And, *Secondly*, that *Sensations of Colors are most certainly surfaces of* UNDULATIONS; *because these Sensations change their Shapes, and their Sizes*, with correspondent changes of any pressure on the eye. Any person, therefore, who should deny either of these facts, might with as much ingenuousness deny that the Mind entertains Sensations of Colors at all. Now, I grant, it *certainly does not necessarily* follow, from these two general facts, that the Percipient or Mind *must be a* SPHERULE. But it follows, that the Mind must be SOME SORT OF BULK; because, I suppose, no person will assume that it is a *Mere Surface without Third Dimension or Depth at all.* And, when I have urged thus much, I shall only add that *many analogies of external things* lead to the supposition, that the Figure of the Percipient Bulk is *Some Modification of a Spherule or Convex Form.*

In fine; It is of serious moment to insist, that there is not a fact in Natural Philosophy that stands higher, if any so high, in the certainty of its evidence, as that of our *Sensations of Colors being made up of* SURFACES OF ELEMENTARY UNDULATIONS. And this fact must, in part at least, pave the way for the *future determining* WHAT *Figure the Percipient* ACTUALLY DOES bear, if that of a Spherule, in some modification of such Shape, should be found not to be that which really exists: While I have no hesitation in hazarding the surmise, that *some mode* of the Figure already men-

tioned will in future time be assigned to the Subject. As for the lofty *dictum*, which would impose upon our understandings, and arrest all progress, by the assumption that we *should never get farther* than that landing in mysterious darkness, to which the Speculations and Theory of Dr. REID had brought us; in this direction: I shall only ask, What unbiased Philosopher is there, who observes what is already done in this direction, but must smile at its overweening? [1]

And here I may surely ask, (I trust with unanswerable force,) With *what consistency* did Mr. Stewart, *in one same autograph*, (which the reader may inspect, as it is before the public,) pronounce an anathema on my labors *on the ground of the Spherule Hypothesis*, or on that of any hypothesis of an extended Mind; AND YET, (with intent to deny my claim to the original suggestion of the generic basis of the Laws of Vision,) in the very face of this anathema, *take up the express and quoted Lockeian position of Lord Monboddo*—that "*Visible* "*Extension and Figure* are *nothing but Color of a* "certain extent and terminated in a certain man-"ner?" Will it be credited, by any one who has not perused that document itself, that, in one same

[1] On this occasion, I may merely hint at the growing discoveries of connection between galvanism and animal motion:—Nor should it be altogether unnoticed here, that the eminent Physiologist *Soemering* is said to have written a work, ascribing a local presence to the Percipient in a Ventricle of the Brain. Every reader may judge of the *tendency* of these collateral researches.

Letter Mr. Stewart has staked his philosophical reputation to such incompatible avowals, as that of denouncing any hypothesis of an extended Mind and yet taking up his refuge under the extended position of Lord Monboddo. In what manner the future Historian (whoever he may be) of the life of Mr. Stewart will be able to dispose of this, and of the whole conversion of the latter from the Philosophical Ground of Reid to that of Locke, it is impossible for me to imagine. But the fate of Philosophy, at least in Britain, and perhaps throughout Europe, is now at a crisis. And although it is manifest I might, at this stage of the matter, with satisfaction spare the proceeding of Mr. Stewart in so far as regards myself; I am placed under an imperative obligation, and indeed have no alternative, except either to sacrifice the subject, or else to place that proceeding in so conspicuous a light, that it shall be impossible in future to obstruct the progress of pneumatological science.

SUBSECTION 3.

Professor Stewart's Criticism on the Philosophy of Kant.—Notice of Kant's Philosophy. Remarkable coincidence, in one point, of the doctrine of Kant with the Views maintained in this Manual.—Dr. Reid's explosion of his own Theory, by himself, in his doctrine of Duration.

1.

We may proceed, in the next place, to the Criticism which Professor Stewart has expressed on the doctrine of the German Philosopher Kant, as bearing upon the foregoing subject.

In his *Phil. Essays, Ess.* 2. *chap.* 2; where he has quoted Kant as affirming that 'Space and Time 'are the two forms of our sensibility; the first is 'the *general form* of our external senses; the se-'cond, the general form of all our senses, external, 'and internal;' Mr. Stewart says—"The only "important proposition which I am able to ex-"tract from this jargon, is that, as *extension* and "*duration* cannot be supposed to bear the most "distant resemblance to any sensations of which "the mind is conscious, the origin of these notions "forms a manifest exception to the account given "by Locke of the primary sources of our know-"ledge."

Now I am under the necessity of believing that Kant's meaning, as obviously expressed in the passage quoted by Mr. Stewart; and, also, Kant's meaning as otherwise expressed; is *directly the contrary* of what Mr. Stewart has here ascribed to him. In the account of Kant's doctrine furnished in the Cyclopædia Londinensis, (it is to be admitted,) he appears to contradict himself in a most extraordinary manner,[1]—namely,—after asserting,

[1] From the contradictory nature of his positions; I have little doubt that Kant, like so many other Philosophers, had, in

in the strongest terms, that our Sensations are the *extended matter* of our thoughts, he in one place says—" We cannot say of the *human soul*, that it is " an extended body, determinable by degrees; " consequently we can have no intuition of the " *human* soul." Now if Kant here meant that we cannot, in the presence of any company of sensations of Colors, affirm that they are *measurable by our Judgment into greater and lesser extents:* (which, however, I certainly think he *did not* mean;) then, I would insist that the Laws of Primary Vision utterly confute him; and that he, in other expressions, as utterly confutes himself. Thus, he says—" In every object of nature, that presents " itself to the senses, we distinguish MATTER and " FORM. Now, as we do not create this matter, " it must consequently be *given;* but this neces- " sarily implies that there is in our Mind a faculty " capable of *receiving the given matter;* and this " faculty is called RECEPTIVITY. In order, how- " ever, that we may become conscious of the mat- " ter thus received in the Mind," &c. I stop, here, to call the reader's attention to the last mentioned expression—namely—" the MATTER" (*i. e.* the supposed objects in nature)—" THUS RECEIVED INTO THE MIND." And, then, I would ask; What becomes of Mr. Stewart's triumphant assertion that, according to Kant, " *Duration* and *Extension* " cannot be supposed to bear the most distant

the outset of his course, immolated his reason upon the altar of that Idol the *Supposed Simplicity of the Mind.*

" resemblance to any Sensations of which the mind " is conscious?" It is, and always has been, to me wonderful that Mr. Stewart could make out such a meaning from the expressions of Kant. And I have stated my surprise, at this, on former occasions. Other expressions of Kant, indeed, leave not a doubt of his having maintained that a portion of *Extension* and of *Duration* (BOTH) are occupied by our Exterior Sensations.

Although I have preferably given the foregoing extracts from the LONDINENSIS, because they apply more *particularly* to the fact; I may observe that, the account of Kant's Critical Philosophy, in the *Supplement* to the CYCLOPÆDIA BRITANNICA, *Ed.* 3. agrees with it: of which fact, the following passage will be a sufficient voucher. And both these works of reference are conveniently open to the general reader. " Extension is nothing real " but as the form of our Sensations."—" If the " objects which produce the impressions afford " also the *matter* of the ideas, then the ideas are " empyric." The use of the word—" MATTER,"—here, I admit, is preposterous: But, making allowance for this; the meaning is clear.—" As " the impressions which objects make upon us " are only certain *apparitions or phenomena;* it is " impossible for us to know what an object is in " *itself*." Now I ask; How does this doctrine of Kant give countenance to the Scheme of Dr. Reid; which makes *Extension* to be an EXTERNAL *object only*, and makes us perceive the *identical figures of external bodies themselves?* And I would farther ask:

Must not such mistakes, concerning the doctrines of other Writers, as that now exposed, lead us to examine with care the construction which Professor Stewart puts upon *other* such matters; and warn us, duly, of the occasional effects of his biases in philosophy?

But here it becomes requisite to direct the reader's attention to a very exceptionable part of the doctrine of Kant. The fact is, he calls "SENSE "*the Power of forming* INTUITIONS."—And, herein, he greatly violates our British doctrine of the subject; which *separates Sense* from *Intuition*, by making the *former to be mere Instinctive Consciousness*, and the *latter an Act of the Judgment*. I confess, therefore, that I was, from the beginning, all along revolted at this doctrine of Kant. And, in fact, from what I had seen, especially from Professor Stewart's estimate of his philosophy, I have until of late scarcely paid any attention to his opinions: For which, perhaps, I have to apologise to his memory, and to the Subject. But, upon very recently perusing the passages in question, I was struck by a very notable coincidence in our respective views of the subject. The fact is, that the doctrine of Kant concerning Sensation; *although it is certainly fallacious in affirming that* SENSE *is the power of forming* INTUITIONS;—is *otherwise true* in that one of his positions which runs thus:—"it is absolutely necessary" (I would say *only physically necessary*) "that we should exert a *mental* "*activity*, which is termed SPONTANIETY; that is, "a CONNECTING activity which gives *unity*, or *power*

" to the received *matter* or *variety*. When the *recep-*
" *tivity* is affected by any given matter, the spon-
" taniety is forced to act, and to connect the re-
" ceived matter into a Unity; and this UNITY *is*
" INTUITION."

The doctrine of Kant, therefore, in *so far as regards the* SIMPLE, *or the* COMPLEX, *nature of the Masses of Sensation*, (of Color, &c.) agrees altogether, in effect, with that which I have insisted upon as resulting from my own speculations on the subject in those General Facts of the Phenomena of Perception which I have called the Laws of Vision: Which Laws, *when followed into the Department of Unicolored* Sensation, and applied herein, resolve the Subject into this General Fact—namely—that *Any Patch of Sensation of* UNVARIED *Color* that is LARGER THAN A SENSIBLE POINT OR MINIMUM VISIBILE *is* NOT A SINGLE OR INDIVIDUAL Sensation, but is AN ASSEMBLAGE of *single or elementary sensations arranged contiguously side-by-side* in the Mind: And the INTELLECTUAL ACT OF ASSOCIATING of this *Plurality of Elementary Sensations, into a* UNITY OR PATCH of Color, is the *work of our* JUDGMENT, and is, therefore, as Kant has truly called it, an " INTUITION of Extension."

It will conclusively illustrate the doctrine of Kant, on this point, when I state here his *Definition of Space*.—He says—" For when we analyse
" our notion of *Space*, we find it to imply *merely*
" *a variety in general whose parts lie one without and*
" *near another, and are intimately connected.* Hence
" it is that, SPACE IS THE FORM OF OUR EXTER-

"NAL SENSE." Herein, I observe, it is plain that Kant had discerned, that our *Ordinary Patches* of Exterior Sensation (as those of color for example,) are *made up of Elementary Parts—or Sensible Points*, arranged side-by-side.

The only difference, therefore, between Kant's view of the subject and my own, consists in his vast mistake of calling SENSE THE FORMATER OF INTUITIONS, that is the mistake of *giving to* SENSE the office of apprehending *Any Patch or Assemblage of Elementary Sensations* of colors; which office, indisputably, belongs *not to Sense*, but to JUDGMENT OR THE FACULTY OF DISCERNING INTUITIONS—that is the Faculty which *connects, or combines, several* things, of any sort, into a *Unity of Object;* and which, reciprocally, can intellectually divide that Compound Unity into its Constituent Elements. When the error in question is corrected; the *implied* doctrine of Kant, with regard to the complexness of any ordinary extent of any one color, is perfectly true. But it is of vital importance, *to his doctrine*, that it should be thus corrected; because we are revolted, at once, by meeting with such a head as the following—namely —"SENSE *is the power of forming* INTUITIONS;"—and we are turned aside, (as was my own case,) without looking farther into a doctrine which carries such a mark of condemnation on its front.

A farther and more important correction, indeed, is necessary, of Kant's doctrine on this subject. But it is implied in all that I have advanced on this part of our mental constitution. He talks, not

only of the "MATTER of Sensation;" but, also, of this matter's being RECEIVED INTO THE MIND: and, of what happens "*on its entering the recep-*" "*tivity.*" If this phraseology be taken literally, or without explanation; it amounts to no other than the ancient doctrine of *Films*, entering the mind through the Channels of the Senses: and thus it forms an *Idealism*, not in the sound philosophical sense, but in the *most visionary sense of that term.* At the same time, it is due to Kant to observe that, the expressions in question, *if duly qualified and understood in their explained sense*, are certainly tenable: For, although it is certain that Sensations are *neither conveyed nor generated;* but that they are *absolutely in the strictest philosophical sense* CREATED; (*i. e.* in other words, upon certain regulated occasions, they *start up in the mind out of nothing;* and, when they leave the mind they *go no where, but return to nothing;*) yet, it cannot be denied that, *as being* STATES *of the mind*, while they endure they are *in a certain sense* RECEIVED when they come, and in the same sense are PARTED WITH OR DELIVERED when they go.

As I have been led to touch at all, here, upon the doctrines of Kant; I deem it proper to offer a few words upon another part of his Philosophy, on account of what is at stake in the principles which he entertained. The fact, which I shall first mention, of these, consists in his having entertained the old and exploded doctrine of Generals or Universals,—involving his method of reasoning

from assumed generals, to *particulars;* instead of reasoning, according to nature, from Individuals to *Classes or Plurals.* This cardinal fallacy has been very justly objected to, against the philosophy of Kant, by the Writer of the Article on the "*Critical Philosophy*" in the Supplement to the Cyclopædia Britannica, already referred to. And I need not here insist farther upon the extent and consequences of the defect which it embodies.

The second objection, to which I shall advert, is one which is chargeable to Kant *only in common with all other Metaphysicians and Logicians.* The fact is, that Kant has implicitly taken up with the accredited and unquestioned Scheme of the Category of Relation, which resolves every Relation into a Plexus of Two Things—namely—Two RELATED SUBJECTS *viewed reciprocally,* the ONE *with a respect to the* OTHER: Whereas, in opposition to that Scheme, I have during some years been led to hazard an estimate of the Subject, from which it results that the Category in question consists in a Plexus, NOT OF TWO, BUT *of* THREE things—namely—of TWO CORRELATED SUBJECTS, *linked together by a* BRIDGE OF LOGICAL CONNECTION *which forms a* THIRD OBJECT between them.

When therefore I consider the extent of the abovementioned two grand fallacies in the speculations of Kant; I must suppose, without at present looking farther into his course of philosophising, that they *cannot have failed* to produce a vast extent of unsoundness in the whole Kantean Philosophy.

With regard to the two considerations just adverted to; each of them is so comprehensive in its province, and so vitally important to the existence of a Sound Rational Philosophy, that I deem the following remarks upon them may be introduced with effect. Mr. Stewart, who has written much upon the first in the Two preceding Volumes of his Elements, has again, in his Third Volume, adverted to the expectation which may be formed from a right use of Language as an instrument of thought. And he has, elsewhere, expressed his opinion that Logic is yet but in its infancy. To both these positions I have subscribed. But, in so doing with regard to the First of them, it has appeared from the views which I have unfolded with respect to Objects of General Reasoning in my Analysis of Language, that I differ very widely from Mr. Stewart, or rather from the whole Sect of Nominalists of whose doctrine he is a most strenuous assertor, in what I suppose to be a right use of Language considered as an instrument of thought. And I would certainly solicit attention to this difference, on the part of those readers whom the subject may interest. With regard moreover to the *Second* consideration—namely—the fact that the Science of Logic is still but in its infancy; I must observe that Mr. Stewart has completed his philosophical course without ever suspecting that a profound and most comprehensive defect exists in the Accredited Logic, in the Scheme of the *Category of Relation* entertained therein, considered as an Instrument for the effecting of Rationated

Science. In having missed the detection of this great fallacy; I apprehend, Mr. Stewart has left open the most extensive field of reform, in Universal Logic, that has been cultivated since the Aristotelian code was first introduced. But, for the truth, or fallacy, of this opinion, I must refer my readers to the "Paper on Relation" annexed to this treatise; and to the Analysis of the Subject, which may be found elsewhere. I have remarked, in another work, that the language of both Reid and Stewart *sometimes implies* a view of Relation congenial with my own. But yet, neither of these Writers ever appears to suspect that, in the instances in question, they were placing themselves upon the ground of a most important, as well as just, hostility to the Aristotelian Scheme of Relation!

2.

The Historical Fact which I shall present to the notice of metaphysical readers in this place, is one which ought to be held up to the particular attention of every one who may have given at all into the Philosophy of Dr. Reid; and which, therefore, I have stated in a former publication: but any answer to which has been avoided by Professor Stewart, during the years which he lived to consider the matter.

We have seen, in the last article, Mr. Stewart's assertion, (however I think it is a mistaken one,) that Kant had *denied* all resemblance, of any of our

Ideas, "either to *Extension* or *Duration*:" From which assertion, it is manifest, Mr. Stewart *admits* DURATION *to be on a footing with* EXTENSION on this question; insomuch that, if Dr. Reid's Theory be proved fallacious as to the ONE of these things, it must be so as to the OTHER ALSO. Besides which, indeed, there cannot be a doubt but this last result must be true whether Mr. Stewart had admitted it or not. Having placed this agreed assumption, therefore, in the reader's view; I proceed to quote the following passage from Reid's Essays on the Intellectual Powers:—"Mr. Locke" (says he) "draws some conclusions, from his account of "duration, which may serve as a touchstone to "discover how far it is genuine. One is that"—'if it were possible for a man awake, to keep only 'one idea in his mind, without variation or the 'succession of others; he would have no perception of duration at all; and the moment he began to have this idea would seem to have no 'distance from the moment he ceased to have it.' —"Now that one idea should have no duration, "and that a multiplication of that *no duration* "should seem to have duration, appears to me as "impossible as that the multiplication of nothing "should produce something"—

Essay 3. *chap.* 5.

Now, in the quotation just cited, it is clear, Dr. Reid's argument, against that of Locke, is undeniable. But, *What is the consequence* of this? The consequence plainly is *that of the explosion of Dr.*

Reid's Theory by himself, as completely as ever happened to any bubble in philosophical speculation; and this, too, by a proceeding scarcely less ludicrous than that of the dreamer, who is said to have destroyed his imagined future fortune by a blow of his foot. What, then, becomes of the exulting tone and assertion of Mr. Stewart, in his strictures on the doctrine of Kant, which doctrine he interprets as *coinciding* with the views of Reid; when Reid himself, in his doctrine of Duration, dashes the alleged coincidence from him by *asserting the very opposite of what Stewart attributes to him*. Assuredly, after such an exposition of a crying mistake as that above-stated; any Philosopher, who was the Author of the mistake, *ought not to write on as if nothing of the kind had happened.* AND YET, we find Professor Stewart, in his last Work, (published in the year 1828,) *still promulgating the Theory of Reid; and complimenting the Writers of France upon their beginning to translate* REID'S PHILOSOPHY! It is true, this encomium, bestowed on the expected French promulgation of the Reideian Theory, becomes far more intolerable when, to the above-described explosion of Reid's Theory by himself, is to be added the subsequent conversion of Mr. Stewart from the Ground of Reid, to the Lockeian Ground of Lord Monboddo. And, if the Country which gave birth to Locke can continue to look with apathy, upon such a course of proceeding on the Subject as that which is made manifest in the statements which I have made of it in various places; it is at least to be

hoped that the Writers of the Continent, the moment they are made aware of the real merits of the case; (which, indeed, is one of the objects of the present publication;) will set the example of aiding in emancipating the Human Understanding from an enthralment so mischievous and humiliating.

It is due to the memory of the late Dr. Parr, to advert here, that, in one of his Letters, he has touched with assent upon the fact that *our Ideas measure Duration*. In that letter, however, it appears, Dr. Parr considered that I had *not shown the nature of the analogy between* TIME *and* SPACE. Upon this, therefore, I observe that, the analogy in question *being admitted by all Philosophers;* (and, even, expressly so by Mr. Stewart himself, which renders it *ad hominem with regard to Reid's Principles;*) is amply sufficient for the present purpose, without going into the nature of it. But the fact is, that SPACE *and* TIME, *having each of them a Sort of Extension*, and being *each of them divisible into parts*, constitutes, of itself alone, all the analogy required. And I repeat, here, that not a doubt can possibly exist but that Dr. Reid has, in the most conclusive manner, given the death-blow to his own Theory by his own proceeding, as above-stated.

Here it is not a little curious; and it is rather a ludicrous instance of the past procedure of Metaphysicians; to remark that Dr. Reid, *in order to be consistent with himself,* OUGHT *to have taken up* that very ground, *of the "no duration of any of our*

"*Ideas,*" which he *condemns* in the case of Locke. And upon this he ought, as his next step, to have assumed that we are "*inspired unaccountably*" with the notion of DURATION *from* "*a multiplication of* "*that no duration.*" Such a procedure as that which I have here pointed out, however groundless it would have been in point of *fact*, would have *perfectly suited Dr. Reid's General Views:* Such a procedure as this *was necessary to the very existence of his doctrine.* But it seems that the real truth of nature, in this case, had *caught Dr. Reid's fundamental prejudice at unawares;* and had thus, in an unguarded moment, overcome its force.

It is in this place, on the other hand, to be remarked, *How crude and visionary were the speculations of* LOCKE *upon* THIS *part of our constitution.*— It is not only a most obvious truth, that every one of our Ideas of Sensation measures a portion of Time; but it is even certain that the *Shortest* Sensations, of each of the different Senses, respectively, take *different lengths of time* for the possibility of their existence. Dr. Parr was perfectly right, therefore, when he asked, if some of our ideas do not remain longer in the mind than others. In the Essay on Consciousness, in treating of the Senses *separately*, I have dwelt upon the different relative portions of time which they occupy. Among other examples, therein, I adduced the experiment of Dr. Herschel; which proved that the most minute *Audual* Sensations occupy about *double* the time that is taken up by the most minute *Visual* sensations—namely—the former about 160,

and the latter about 320, Sensations in a second of time. The general fact, therefore, of our sensations and ideas being involved in the NATURE AND LAWS OF TIME, is a matter beyond all controversy. And this, of itself alone, would be a good collateral proof, that our Ideas are involved in the *Nature and Laws of* SPACE ALSO.

The explosion of Dr. Reid's Theory by himself, on the ground of the MEASURABLENESS OF OUR IDEAS, becomes indeed comparatively a matter of very little importance *in itself*, after the recognition of the Physiological Laws of our Sensations, and the virtual assent of Professor Stewart to the validity of these Laws. But the case was very different twelve, or fifteen years ago. And the matter is still of very material importance for the *secondary* purpose of showing, that *no mishap of this sort*, to the Theory in question, could have the efficacy of preventing Mr. Stewart from continuing to employ the influence of his Name, in order to rivet the shackles of the Reideian Philosophy upon the necks of posterity.

SUBSECTION 4.

Of the Method of Philosophising of the School of Reid.

If I may venture to judge from my own feeling of the matter, the repugnance of our reason is so strongly called into action by what may be called

the *method of philosophising* adopted by the School of Reid, that this single consideration alone forms of itself a prominent exceptionable feature in its procedure. This objection, indeed, has long since been brought against it by Dr. Priestley, in terms manifesting a very deep sense of the fact. And I must affirm that, in a variety of very important instances, the same feeling has forced itself upon my mind. To one only of these instances, however, I shall at present particularly advert: and I shall do this inasmuch as it bears immediately and essentially upon the subjects under consideration in these papers. The thing, to which I now allude, is the fact of Professor Stewart's having, in the very outset of his speculations, *condemned, as being unphilosophical, all inquiry into the truth whether the Mind is a thing extended or inextended;* AT THE SAME TIME *that he has, with the most wonderful inconsistency, eulogised Dr. Reid's* "INQUIRY," (*concerning the extension, or inextension, of our sensations,*) *as being a* "MODEL" *of philosophical speculation.*

The degree of bias which had strength enough to blind the eyes of such a man as Mr. Stewart, to the incompatibility exhibited in these two contradictory positions, must have been such as can leave little surprise at any other effect it may be found to have produced in him. And all that remains to be done, here, in order to guard the Subject from being hurt by such an attempt as that above mentioned—namely—to place any research concerning the mind's extension out of the pale

of legitimate inquiry, is to *show that I have not misrepresented the counter assertion* of Mr. Stewart on this question: Which, in behalf of the Subject, I am manifestly bound to show, in order that all impartial persons may be enabled effectually to throw back, with the philosophical consequence which such a procedure deserves, the derision which his expressed anathema was designed to cast upon that whole bent and direction of research which has ended in the proofs of its validity; and in which, indeed, I feel an individual interest, since it forms my most gratifying reflection to have prosecuted it through all obstacles: Although, from the antecedence of his writings it is evident, and is duly adverted to here, that Mr. Stewart had not my individual labors in his view when he thus strangely fell into such a violation of philosophical consistency; and, therefore, I cannot herein be supposed to be actuated by any private feeling from his opposition.

In the early part of the *Introduction* to his "ELEMENTS," Mr. Stewart expresses himself thus:—

"A similar distinction takes place among the "questions which may be stated relative to the "human mind:—Whether it be extended, or inex-"tended; Whether or not it has any relation to "place; and (if it has) whether it resides in the "brain, or be spread over the body, by diffusion, "are questions analogous to those which Meta-"physicians have started on the subject of matter. "It is unnecessary to enquire, at present, whether "or not they admit of any answer. It is sufficient

" for my purpose to remark, that they are as " widely and obviously different from the view " which I propose to take of the human mind in " the following work, as the reveries of Berkeley " concerning the nonexistence of the material " world, are from the conclusions of Newton and " his followers."

In a passage a little prior to this, Mr. Stewart, confounding in his own imagination every inquiry concerning the Extension of the Mind with the doctrine of Materialism, as if these two different and opposite researches on the Subject were and must be ONE AND THE SAME, assumes that,— " Instead, therefore, of objecting to the scheme of " Materialism, that its conclusions are false; it " would be more accurate to say, that its aim is " unphilosophical. It proceeds on a misrepresen- " tation of the proper object of science; the diffi- " culty which it professes to remove being mani- " festly placed beyond the reach of our faculties."

The first criticism, which it is important to offer upon the passages now given, is to urge the manifest fact that Mr. Stewart certainly confounds the notion of an EXTENDED Mind, with that of a MATERIAL Mind. Nor is this to be wondered at, since it was the uniform opinion of metaphysicians that an extended mind must be material; and no writer had ever looked in a direction to discern that, instead of this rash conclusion, Sound Philosophy must view the *Extension of the Mind as the legitimate ground of a denial of the* EXISTENCE OF

MATTER AT ALL. From this last mentioned result, however, it becomes evident how unfortunately the endeavours of philosophers to deny to our Sensations the attribute of Extension, with a view to elude their fears of the consequence of the Mind's being material and corruptible, has been *carrying Philosophy directly away from the truth of the Mind's real nature and incorruptibility.*

It is, in the next place, to be objected that, although it is to be acknowledged as a legitimate distinction; and, as such, has been assumed by Mr. Stewart in the place referred to; to hold out the study of Pneumatology as having for its appropriate and exclusive objects "*such operations as* "*sensation, thought, and volition,*" it was, at the same time, a most unwarranted accompanying position to expressly exclude from the enumeration, as Mr. Stewart has done, the considerations of "*Extension* and *Figure,*" unless it had been previously proved, or admitted by philosophers, that our Sensations are void of these attributes; whereas, with regard to any such assumption as the latter, we have seen that the contrary has become a matter not only of analytical proof, but also of express concession on the part of Mr. Stewart himself, in his appeal to the position of Lord Monboddo.

In a *Foot Note* on the subject, Mr. Stewart, indeed, has adverted to the consideration that— "Some Metaphysicians have urged that the un- "known Substance which has the qualities of exten- "sion, figure, and color, may be the same with the

" unknown substance which has the attributes of " feeling, thinking, and willing." But he objects, to this, that " *it is only an hypothesis:*" and that, if it were true, it would then turn out, not that the mind is material, but only that *body is spiritual.* Now, this last consequence, I observe, is undeniable. And, since the truth of the *Extension of our Sensations* will never henceforward be charged as being an " *hypothesis ;*" there is a decided and a fortunate agreement upon this point. I shall proceed, therefore, to show the fact, that Professor Stewart has eulogised *that same* sort of research in Philosophy in the case of DR. REID, which he had condemned in the case of all other Writers: In doing which, he has exerted his powers and influence, however unintentionally, to prevent Philosophy from ever making its way BACK, through the darkness which has been induced by the assumption that EXTENSION and MATTER are things which *must necessarily be united in one essence.*

In the Volume already mentioned, and in the very same Introduction (Part 1.) where he is treating of the *proper objects* of pneumatological research, Mr. Stewart has entered a very conspicuous notice of the labors of his Predecessor; wherein he emphatically calls the attention, and especially directs the study, of his readers, to " *the* " *excellent models of this species of philosophising* " which the writings of Dr. Reid exhibit;" " which" (he says) " give us ground to expect, " that the time is not far distant, when the study " of the mind shall assume that rank which it is

" entitled to hold among the sciences." Nothing now remains, therefore, but to produce, to the reader, a *specimen* of these excellent models of philosophising. And the following, I conceive, will fully suffice for the purpose; only premising that, Professor Stewart, in the place referred to, has expressly specified his desire that his readers should " *study with care* the fifth and sixth sections " of the fifth Chapter of Reid's Inquiry into the " Mind, also the seventh section of the same " Chapter." The following, then, is the passage here last recommended.

" This I humbly propose as an *experimentum* " *crucis* by which the ideal system must stand or " fall: and it brings the matter to a short issue: " Extension, figure, motion, may, any one, or " either of them, be taken for the subject of the " experiment. Either they are ideas of sensation, " or they are not. If any one of them can be " shown to be an idea of sensation, or to have the " least resemblance to any sensation, I lay my " hand on my mouth and give up all pretence to " reconcile reason to common sense in this mat- " ter."

The first observation, which the subject unavoidably obliges me to make upon this passage, is that, *had* Dr. Reid *lived* to peruse the Laws of Primary Vision, together with the concession of Professor Stewart with regard to the truth of these Laws; *he must then have laid his hand upon his mouth*, as he conditioned to do in such event. But, in so doing, he need not have been in the least

alarmed for the *consequence:* because the *Extension of our Sensations,* considered as *Modifications of our Minds,* is a fact AS FOREIGN FROM, AND HOSTILE TO, THE BERKELEIAN IDEAL THEORY, as can be at all imagined. It ought to be unnecessary to explain here, that, by the Ideal Theory, that is as modified by Berkeley, is meant an assumption of *Ideas considered as Detached Substantive beings, floating occasionally in the mind, but which are* NOT MODIFICATIONS OR STATES *of the mind itself.* And, according to this chimerical assumption, the Scepticism of Hume against the Existence of the Mind is valid. But a result totally opposite to this is the consequence when the recognition of the Laws of Vision is taken, together with the now-universally-recognised principle that Sensations and Ideas are Modifications of the Mind itself. And nothing, then, can stand in the way, to obstruct the advance of Pneumatology, when the attention of Philosophers shall be sufficiently drawn to this fact.

But I deem it a due precaution, here, to afford one, or two examples, in order to show farther, whether the Inquiry of Reid was, or was not, an inquiry into the "*Extension* or *Inextension*" of the mind. In Chap. 5. Sec. 5. of his Inquiry, Dr. Reid says—"suppose him first to be pricked with "a pin; this will no doubt give a smart sensa- "tion: he feels pain; but what can he infer from "it? Nothing surely with regard to the existence "or figure of a pin."

Again, Chap. 5. Sec. 6.—"I suppose, thirdly,

"that the body applied to him touches a larger, "or a lesser, part of his body. Can this give him "any notion of its extension or dimensions? To "me it seems impossible that it should, unless he "had some previous notion of the dimensions and "figure of his own body, to serve him as a mea-"sure."

Such, as the above extracts, are *specimens of the general tenor* of Dr. Reid's eulogised experimental inquiry, to determine whether, or not, our SENSATIONS are extended. And yet, Mr. Stewart has condemned, in the way already described, the whole direction of inquiry to determine whether or not the MIND is extended! Is there any unprejudiced person, interested in the advancement of Philosophy, who would stand up and defend the CONSISTENCY, (without at all taking in here the UNPHILOSOPHICALNESS) of such a proceeding?

On this topic, I have only room to remark farther, that, while I *altogether agree as to the legitimacy of Dr. Reid's Inquiry*, I view the *details* of his proceeding as a manifestation of the most deplorable prejudice; and, as involving his conclusions, from his experiments, in the most certain and most mischievous fallacy, in their bearing upon the Philosophy of the Mind.

In case it can unfortunately happen, that my Countrymen should still be slow to take cognisance of the matter; I would earnestly commend to those Writers on the Continent, who may think of turning their attention to the dissemination of

the Reideian Philosophy, to examine and weigh well the merits of the objections stated in the foregoing and present Sections; and to proceed accordingly, in order that they may not lend their talents to the plunging of Philosophy back into a state of darkness, certainly more profound than that which existed when Locke began to dispel the mists that hung over her.

And here, with regard to the weight, or apparent severity, of the various strictures which I have deemed it imperative upon me to offer, in my several writings, upon the Philosophy of the Reideian School; and which might be thought, by some of their friends, or admirers, may have been called forth, in part at least, from personal feeling; I am quite content to appeal to the *truth, and the moment,* of the objections which I have laid against those Writers, to vouch for my having been actuated by a firm belief that Philosophy has been *not only wronged by their views, but also oppressed by their manner of inculcating them.* In what way other persons, situated with regard to the late Professor Stewart as I have been, would have acted, or felt; they are the best judges. But this I may say, without any thought of paying court to opinion, that I have always found in myself a strong disposition to venerate what I have conceived to be noble in Human Nature; among the Objects of which feeling, I have certainly, from an ea ly period, viewed Professor Stewart as possessing a high place. And, in the case of suffering wrong from any such quarter, perhaps any inge-

nuous mind will agree with me, that we do not feel resentment, or hostility; but right ourselves with a feeling of regret, in as far as personal feeling is at all concerned.

SUBSECTION 5.

1.—*Of the use and abuse of Analogical Language and Analogical Imaginations in Pneumatology.*—*Physiological nature of the Operations of Mind.*—2. *Historical fact of the change of Dr. Reid, from the Berkeleian Scheme of Ideas to his own Theory.*

1.

Nothing has seemed to give a higher philosophical tone to the speculations of the Reideian School, especially when viewed by readers of a certain bias on the subject, than its *condemnation of the analogical phraseology* which had generally obtained in the science of Mind. And this proceeding alone must have had a great tendency to induce, to inlist under the standard of that scheme, such readers as could be worked upon by a desire to deny all affinity of nature between Mind and the thing which they supposed to be corruptible under the name of Matter. At the same time, it cannot be denied, that, in treating of the operations of the mind there is a demand to deal occasionally in analogical phraseology, even when this cannot be justified by any evidence of *similitude*

between the things compared: as, for example, when we compare the mind to a *balance*, and talk of *weighing reasons;* there is in this case a certain analogy, but no similitude. But the object of the school of Reid was far beyond a condemnation of the analogical language employed with regard to our more *Interior* Thoughts; for it involved, as an essential and indeed a primary consideration, a denial of any similitude between our more Exterior Sensations and their External Extended Causes, —a similarity which had never been questioned by Philosophers, from Plato down to Reid. In the course of their endeavours to inculcate this denial, and especially in the more advanced speculations of Professor Stewart to effect this object, it is very material to remark, how much he was put to it to adduce *any authority* in support of such a project. The present article has for its ultimate object to shew, upon what an illusory and palpably-mistaken foundation Dr. Reid has grounded his project. But, as a preparatory consideration to this, it appears of importance to show, also, that almost the only authority which Mr. Stewart, in the course of his reading, could bring to bear at all upon the Subject, in any way favorable to his views—namely—the writer CROUSAZ (even if we should admit *him* as an undeniable authority for such a fact;) *has not spoken to the fact in any way that can bear out the conclusion* for which Mr. Stewart in reality, though not ostensibly, has cited him.

In his Philosophical Essays, Ess. 1. chap. 1. the Professor quotes the Writer in question to the

following effect.—'When I speak of desire, con-'tentment, trouble, apprehension, doubt, certainty, 'of affirming, denying, approving, blaming;—I 'pronounce words, the meaning of which I dis-'tinctly understand; and yet I do not represent 'the things spoken of under any image or corpo-'real form. While the intellect, however, is thus 'busy about its own phenomena, the imagination 'is also at work in presenting its analogical the-'ories, but so far from aiding us, it only misleads 'our steps, and retards our progress. Would you 'know what thought is?—It is precisely that 'which passes within you when you think: Stop, 'but here, and you are sufficiently informed. But 'the imagination, eager to proceed farther, would 'gratify our curiosity by comparing it to fire, to 'vapour, or to other active and subtile principles 'in the material world. And to what can all this 'tend, but to direct our attention from what 'thought is, and to fix it upon what it is not?'

With regard to the passage, now re-quoted, providing it be taken to apply *only to such classes of thought as* are *therein enumerated*, and which are to be ranked along with those above-mentioned by me, there can be no doubt that there is a certain sense in which it is true, and salutary to be inculcated. And if it was the intention of Mr. Stewart to confine its application to *this extent*, and in *this sense;* he was, of course, justified in citing it for his purpose. At the same time, and before I pass on to the farther consideration of this proceeding, I deem it due to the subject to assert, as an indispu-

table fact, that there is *ground in our consciousness* for the use of analogous phraseology in describing almost all the different classes of our thoughts: And the only fault, or abuse, of this expedient seems to be that we have no conception of the matter in question *sufficiently definite, or clear, to justify the particular imagery which we employ* as exhibiting a semblance of mental operations. Dr. Reid himself, (who equally with Mr. Stewart was the rigorous opponent of any *resemblance* in the subjects,) admitted in the fullest manner the existence of such *analogies;* and expressly attributed to the mind "*operations;*" and to our thoughts a usual state of "*ebullition*" and "*fermentation.*" And, therefore, it is *essential to insist here upon this agreement to the fact, that there* IS ground for the assertion of these analogies; which it would be vain to attempt to deny. In other words; there is within us a *continual conscious variety of feelings and appearances co-existent in time:* and these feelings and appearances are *continually changing and giving place to others in succession:* insomuch, that the fermentation of liquor in a vessel,—(the figure chosen by Dr. Reid for an illustration of the fact)—is *comparative stillness and simplicity,* to the *mental mixture and variety* in question. At the same time, all philosophers are now agreed that *the thoughts or operations of the mind are nothing but states or modifications of the mind itself.* — Can we, then, behold it as being any other than the result of a philosophical hallucination, when we hear it, in the face of all this admitted VARIETY OF MENTAL

MODIFICATIONS, gravely asserted that the mind must be a SIMPLE ESSENCE? What renders this the more surprising is, that Professor Stewart himself, though he talks not like Dr. Reid by employing the terms—*ebullition and fermentation;*—YET, *altogether admits the fact in its fullest extent.* Thus, in the beginning of his Elements, (page 9.) he says —"Upon a slight attention to the operations of "our own minds, they appear to be so complicated "and so infinitely diversified, that it seems to be "impossible to reduce them to any general laws." —With regard to this fact, indeed, all Pneumatologists are agreed. And can we, then, restrain our wonder when, along with this, we hear on any hand an arbitrary assumption that the Mind is a *Simple* Thing, that is, an assertion of an *Infinite Co-existent Variety,* and an *Infinite Succession of Changes, all taking place in a Substance which is assumed as being* ABSOLUTELY SIMPLE? (See Note c.)

As for the farther question, Whether what are usually understood as being the *more interior* changes in the mind are in *any way similar* (which certainly means *more than analogous*) to the physical operations of Body? I apprehend that, after it has been proved, (as it has been) that what may be called the *more exterior* thoughts of the mind—namely—our Sensation of colors, &c. are certainly *extended* modifications, there cannot be any reasonable plea to deny the *probability* of the fact: Although, with regard to this question, the veil is not, and perhaps never may be, withdrawn from the means of resolving it. As a sort of parallel

procedure with a view to illustrate the question, however, I observe that, although we frequently feel, and cannot doubt, that there are internal changes going on within the organic frame of our bodies, we cannot from this fact in the least degree *define the analogy of those internal parts to the external members of our* frame, *nor trace the mechanism of their operations:* whereas, in contrariety to this, we can accurately define the *exterior* parts, and describe the exterior motions, of our bodies. In like manner, then, we cannot give any account of the shapes, sizes, or motions, of our more Interior Thoughts: whereas, we can accurately describe our more Exterior Thoughts as having superficial sizes, and shapes, in endless varieties, both isochronously and in succession. The reason of the thing appears to be similar in each case: A man cannot peer into either his *own mind*, or his *own body:* But, as he can ascertain, from an actual survey, that the *outside* of his Body operates by Extension; he would, by parity of reasoning, (even without the aid of looking into the Bodies of other men,) be bound to infer that the *interior also* of his frame operates by Extension: And, I conceive that this same reasoning must be legitimate when applied to the mind.

And here, as bearing upon the subject, I observe that Professor Stewart, notwithstanding all the length he has gone in the matter, was not led into the absurdity of denying that his *mind was an inhabitant of his body:* On the contrary, he has left the Ancient Doctrine of the NON-RELATION OF MIND

TO PLACE, as a *Derelict* for the use of those who may choose in modern times to pick it up: He says, in the Pre. Dis. in his Phil. Ess. page 5. "I flatter myself it will not be inferred"—"that I "entertain any doubt of the intimate connection "which exists between these phenomena" (he means the *intellectual*) "and the organisation of the "body." Let us now, therefore, suppose a man's body exposed to the action of fire: And, in this case, if his *mind be admitted to be in his body*, it is impossible to deny that his *mind*, as well as his body, must become heated. Let us next, then, observe *what we invariably find to be the effect* of heat upon the body, and upon the mind, respectively.—A gentle heat or warmth *sooths the mind gently;* and *insensibly expands the body*. A great heat makes the parts of the *body sensibly repel each other;* and, in its great increase, it *destroys the body by distancing its parts:* And the *identical same heat causes anguish and agony in the mind.* Can any man, then, if he reason legitimately on this correspondence, deny that the correspondence affords great ground of probability that the *anguish or agony of mind* occasioned by heat is caused by *some modification of structure* therein? I feel assured that Newton would have assented to this probability, and have given it his deliberate support. As for the reason why we are enabled to discern what may be called the exterior anatomy of our Sensations of Color, and of Touch; and yet, are denied the like discernment in the case of our more interior thoughts; it may, perhaps, be because the

different result is unavoidable from the very *nature* of the latter. But this much, at least, may be said, upon *other ground*,—namely—(*upon that of final causes*) which is, *that there is the greatest utility and demand* for our discerning the anatomy of our exterior modifications such as colors; while there appears no pressing demand for our discerning the anatomy of our more inward thoughts. And it may be farther suggested, that, so beautifully is this economy of Providence observable even in the *Variety of Sorts of our Exterior* Sensations, that their Extension is *hardly* to be demonstrated in the Sense of *hearing*, and *not at all in that of smelling;* in each of which Senses it would be a useless thing to note it: While the property of Extension is *plainly demonstrable* in the Sense of *Taste;* and far more definitely so in *Touch;* and exquisitely so in the finer and distant Touch of *Sight*—the most comprehensive and intelligent of all the Senses.

Collaterally with these considerations, I observe that *analogical language* must have proceeded originally from *analogical imaginations;* and not the reverse. And, therefore, it was not a sound assumption, in Crousaz, to affirm that analogical *terms* are the causes that *set the imagination on work;* although such terms, certainly, might thus operate upon any man who should not think at all for himself. The undeniable truth of the matter is that, the imagination of every man justifies, because it *suggests*, analogical language. And, what is a fact of much greater moment on this point is, that *the*

imaginations of all men are agreed upon asserting specifically ONE SAME *train* of analogies; *which unanimity in the proceeding of all Minds* is good ground for believing that the images in question must be real, and true. And since, in correspondence with this fact, the Exterior Sensations of the mind are ascertained by rationated proof to possess a *physical* anatomy, and to undergo continual and endless changes by the medium of *Extension;* it must be legitimate to infer that our VERY PASSIONS AND MOST INTERNAL DELIBERATIONS are, in like manner, effected by, or with, *some physical* changes in the interior of the Percipient.

To step, for a moment here, from the confines of Pneumatological science, and touch upon Cerebral Anatomy; which two Subjects are certainly two most distinct Sciences; and which I have not the smallest intention of confounding, although perhaps the one may be made to reflect some light upon the other; I am led to suggest, that it would seem as if the Percipient cannot be less in Volume than can enable it to sustain Sensations of Colors of *nearly the same size as the visual impressions made on the retina of the eye:* Because all distant objects, whatever be their real magnitudes, are perceived by the mind as being neither notably larger, nor less, than the impressions on the retinated expansion of the optic nerve. Along with this fact, I farther remark, that the *beds* in which the optic nerves terminate, (which cerebral beds, in all probability, discharge the *last* nervous process upon the Mind,) appear to be *nearly of the same gross size* as the

expansion of the retina over the fund of the eye. Having adverted to these corresponding facts; I shall leave it to others to consider, whether this approximation to equality, between these EXPANSIONS OF EACH END *of the Optic trunk*, is an accidental coincidence, or is one which seems to bear at all upon the question concerning the *Seat of Perception*.

It is said that no less a physiologist than SOEMERING has written a work, purposely to show that the place in question is in a *Ventricle of the Brain;*—a fact which I remark here only in order to observe that, the inference he draws *may, or may not*, bear upon the fact to which I have just adverted. All that I shall hazard upon the matter at present is, that, *if anatomy shall ever solve the problem of the* SEAT of Perception; and, if this *Seat prove to be as large* as would seem to be indicated by the superficial expansion of our sensations of Colors; this Bulk would leave most ample room for an infinity in the Variety, and the Succession, of Changes which our Thoughts actually exhibit. A Percipient so large, as that now supposed, would be a world in size, compared with any of those microscopic animals which exhibit a vast variety of changes, even in their extremely minute bodies.

In case any Reideian should incline to censure me, for having in the above remarks transgressed the limits of Pneumatological Science; I might reply that, Professor Stewart has been guilty of no less a transgression of those limits. In a *Note, in the Pre. Dis. to his Philosophical Essays, page* 10,

he has entered into a suggestion of his opinion that —"the hypothesis which assumes the existence "of a subtil fluid in the nerves, propagated by their "means from the brain to the different parts of "the body, is of great antiquity and is certainly "less repugnant to the general anatomy of our "frame, than that" (he means the hypothesis of *vibrations*) "by which it has been supplanted." Now I agree with Mr. Stewart, with regard to this preference. But, at the same time, I must object that, *the very fact of his having condescended to express* ANY CHOICE, *between any physiological hypotheses whatever on the subject,* as completely brings him under the charge of *violating his own course of philosophising as an* INEXTENTIONIST, as if he had preferred the *worst,* instead of the *best,* hypothesis that could be formed on the subject. And, to this example of his *tampering with physiological hypotheses,* I have to add that, it was nothing short of a manifest absurdity in Mr. Stewart to *admit the intimate connection of body and mind;* and, in Des Cartes to *assign the pineal gland to the soul for its residence;* while both these Writers *gravely asserted the mind's inextension*: which Des Cartes did *formally;* and Professor Stewart (*though he affects to condemn the inquiry at all*) has done *virtually* in his denial of the Extension of our Sensations. There is no unbiased person, of the least competency in philosophical speculation, but must admit that the *pure Scholastic doctrine of the* INEXTENSION *of the Mind, if attempted to be coupled along with that of the Mind's being in* PLACE, is a most manifest ab-

surdity: And yet, these two Writers have promulgated this vast absurdity without disguise, or a heeding of the consequence. Philosophy is bound to wipe away such a disgrace. There is an absolute necessity, for her very credit or existence, that no Writer should in future be allowed to play as it were fast and loose, upon this point. And, if any one should so transgress; he must pay the penalty of being silenced, though we should still ascribe to him the merit of having been in earnest, and of not being aware of his transgression.

As an additional striking example of this kind of proceeding on the part of Mr. Stewart; we have seen, it has been expressly admitted by him that there is an intimate connexion between the Body and the Mind; and yet, how does this agree with his doctrine of CAUSALITY? Has he not expressed his belief that, the wonder of one body's operating upon another from a distance, is not at all lessened by supposing the two bodies to be in contact? Then, WHY SHOULD HE believe in an *intimate connexion* between our Body and our Mind? Philosophy rejects the concession, with proper feeling, *as coming from* HIM. He was bound to be consistent with himself. In a word; Mr. Stewart, from his general doctrine of Causality, OUGHT *to have outgone all the Schoolmen in denying to the Mind all relation to place*:—and yet, "he *flatters himself* "*it will not be inferred* that he entertains any doubt "of the intimate connexion which exists between "these" (i. e. mental) "phenomena and the or-"ganisation of the body." Nor is this piece of

legerdemain yet completed: for we find, in another place, Mr. Stewart exultingly asserts that, for any thing we can prove to the contrary, the connexion between the Sensations and the External Impressions *may be* MERELY ARBITRARY, i. e. MERE CONCOMITANCES, *without any connexion at all!* What have the men of England done, that their Understanding should have been deemed a fit Votary, to bow to such tergiversations in so-called philosophy as are here exhibited?

But to return, now, to the intention of Professor Stewart in his introducing the quotation from Crousaz. It appears to have been his purpose not only to deny those analogies which his predecessor Dr. Reid had freely admitted; but, principally to condemn, in common with Reid, every assumption of *any resemblance* between any of our Thoughts or Sensations and the primary qualities of bodies. Upon this Mr. Stewart's design, therefore, I observe that the denial by Crousaz, of any resemblance, between such Thoughts as he has enumerated in the passage in question and the Images to which they are usually likened, is *perfectly compatible* with a collateral admission that our *Exterior Sensations are extended.* In order to illustrate this truth, I shall here advert to the doctrine of Locke with regard to primary and secondary qualities; because, I suspect, many readers have been led into a misconception of this part of his doctrine. Locke justly held that, *those sensations of the mind* which he unfortunately called the *Secondary Qualities of bodies*—namely—colors,—sounds,—smells,

—&c.—are NOT RESEMBLANCES *of any thing in* BODIES. But, any one has greatly mistaken Locke, if he supposes him to have held that our Sensations of color are *not extended.* In proof of this fact, besides Locke's well-known comparison of our *Ideas of Sight to "Pictures in a dark closet,"* I shall merely refer to the following passage, (*Book* 2. *chap.* 13.) where he says—"It is true solidity "cannot exist without extension; neither can "scarlet color exist without extension." And here I need not tell the least informed reader that, by "*color*," Locke meant a *Sensation*, and *not an external* quality. Here, therefore, it is manifest, Locke speaks perfectly in a parallel, or at least compatibly, with Crousaz; that is to say, he denies that Red, Blue, or Yellow, *considered merely as the* TINTS, *red, blue, or yellow,* is like to any such quality as *Extension*, or *Figure;* but he nevertheless asserts, as the most undeniable of truths, that these *Tints are extended and figured;* and that they "*cannot exist without extension.*" For the sake of such readers as may require to have the distinction in question more perfectly pointed out, I may here urge that, the TINT of yellow, or of any other Color, is *as different an object* in the contemplation of a Pneumatologist from the EXTENSION of that *Tint*, as Color is different from sorrow, or gratitude: *although* Color is *essentially united with Extension* in the same Sensation, of which it forms the *physical basis.*

But here, on the other hand, it is requisite to remark that nothing could be more confused, or

illogical, than the phraseology and reasoning of Locke concerning what are called Primary and Secondary qualities of bodies,—a procedure which certainly left open to Dr. Reid a field for showing that our Sensations of Touch, *considered* MERELY AS TOUCHES, are no more resemblances of either *Solidity, Hardness, Figure, or Extension,* than our Sensations of Colors, *considered* MERELY AS TINTS, are resemblances of Figure, or Extension. But the fact stands demonstrated, nevertheless, against the whole attempt of Reid, that the Sensations of every one of our senses (although in the sense of smell it is wholly useless, and hardly discernable,) possess the *combined* attributes of being, *each one of them, some* TOUCH, TASTE, SOUND, SMELL, or TINT, *united to or bottomed upon a* BASIS OF EXTENSION. And, agreeably with this distinction, we find, Locke, while he calls COLOR, *considered* AS MERE TINT, *a* SECONDARY *quality of bodies,* at the same time also justly assigns to SIGHT an apprehension of the PHYSICAL BASIS of these Tints—namely—EXTENSION, which last is a *Primary* quality of bodies. I suppose the exposition, now afforded, may perhaps serve to extricate many readers from a difficulty, which I think they may have labored under, to understand the meaning of much that has been written on this Subject; since the term *Secondary quality of bodies* has a strong tendency to involve its merits in confusion.

A particular contexture of the minute parts of bodies gives them a power to reflect light in such a manner, as to raise in us Sensations of Colors:

And *this power* is very properly called a *Secondary Quality in the body:* But this phrase has unfortunately been misapplied, or misapprehended, to mean *Sensations of Colors in the Mind.* Hence, there is an ambiguity in the phrase in question; which readers in general may require to be guarded against.

2.

As forming the last of the crucial objections, which was proposed to be laid out in this work against the Reideian Philosophy; I come now to the statement of that very extraordinary change in the philosophical direction of Dr. Reid—namely—his going over, from the Idealism of Berkeley, to which he had originally subscribed; and his consequent projection of his own Theory. After the series of objections which have been laid in the foregoing pages, against the assumptions and conclusions of the Reideian philosophy, I conceive it will be crowning the mass of fallacies, which have been shewn to be built up in that philosophy, to afford the history of this singular apostacy; it being, in my humble opinion, a description of not only one of the most extraordinary conversions from one philosophical creed to its opposite; but, at the same time, a conversion founded upon one of the most egregious mistakes that ever befel a speculative mind, in any enlightened age. And, if I am borne out in this opinion, the interests of

Pneumatology are too deeply at stake, not to make it urgent upon all those, who may have inclined to think either Dr. Reid or his distinguished Successor a sound authority on the Subject, to attend earnestly to the merits of the case.

In his Essays on the Int. Powers, *Essay* 2. *Chap.* 10. Dr. Reid, with a candour that affords a light for which the Subject will ever be deeply indebted to him, informs us to the following effect:—"If I may presume" (says he) "to speak "my own sentiments, I once believed this doctrine "of Ideas so firmly, as to have embraced the whole "of Berkeley's System in consequence of it, till "finding other consequences to follow from it "which gave me more uneasiness than the want "of a material world, it came into my head, more "than forty years ago, to put the question, What "evidence have I for the doctrine that all the ob-"jects of my knowledge are ideas in my own "mind?"

Now, before I proceed to state what was the *result* of this question in the mind of Reid, it is very material to put the question: How could this Philosopher, in the blush of his manhood, "*em-*"*brace the whole of Berkeley's* system," which *primarily excludes the possible existence of a* MATERIAL world; when Dr. Reid, *afterwards*, found out that a *belief in a material world is a law of our nature, a law of instinct*,—that it "*defies the powers* "*of reason; and laughs at all the artillery of the* "*logician*?" Assuredly, if this discovery of his be *real*, he must have felt it *as a law of his nature from*

the beginning of his life;—and, at least, it must have obliged him in his first manhood to laugh as heartily at all the artillery of BERKELEY; as it afterwards was viewed by him as having such effect upon that of the LOGICIAN. And here, as a matter worthy of remark, I observe that Reid might have embraced a certain doctrine of Ideas, *and still* have believed in a Material World, as we know was the case of Locke and Des Cartes. But, we find, he generously throws the whole matter into the opposite scale,—"*he embraced the whole of* "*Berkeley's* system;" and, during that time, no doubt, he thought lightly, or rather laughed heartily, "*at the want of a Material World:*" Yet he afterwards finds that, *the belief in a material world is a law of our nature, prior to any other belief.* If there be any man, who can contemplate such a procedure in Philosophy as is exhibited in the case now stated, without viewing it as being a most deplorable example of the operation of prejudice; I leave him to the consideration of those who are more competent to pronounce upon his impartiality than I am. But I proceed, now, to the History of the EVIDENCE, upon which the conversion of Dr. Reid appears to have been brought about.

The doctrine of BERKELEY, on the subject of Visual Perception is, that, if a man were born blind and were subsequently made to see;—"the "objects intromitted by sight would appear to "him (as in truth they are) no other than a new "set of thoughts, or sensations, each of which is

" as near to him as the perceptions of pleasure or " pain." Now this doctrine of Berkeley, in common with the views of Locke and of Des Cartes, (*assumed merely upon a consciousness of the fact,*) is that very same truth which it has been the office of the Laws of Primary Vision to reduce to *analytical proof*. And, in opposition to this common assumption of all Idealists, Dr. REID has proceeded, in his philosophical apostacy from the Creed of Berkeley, upon a mistake of a fact, which I shall now state; observing that it is the *only attempt at evidence,* so far as I am aware, that Dr. Reid has ever adduced, in his writings upon this subject.

It must be evident that, when Reid first took the alarm, and became bent upon forsaking the Scheme of Berkeley provided any possible means should present of quitting its wreck; he must naturally have looked around him for *some argument,* which could enable him to deny the IDEAL extension of our sensations of colors, which, as a Berkeleian, he had heretofore *firmly believed in*. Now, it appears that, in this state of his mind, Dr. Reid fell upon the statement which Cheselden published, in his account of the youth whom he had couched for a cataract; in which account we have the following passage:—" they can discern " in no other manner than a sound eye can through " a glass of broken jelly, where a great variety of " surfaces so differently refract the light, that the " several distinct pencils of rays cannot be col- " lected by the eye into their proper foci; where- " fore the shape of an object in such case cannot

" be distinguished, though the colour may."—Dr. Reid does not, indeed, expressly inform us that he grounded his Scheme upon this account of the fact furnished by Cheselden. But it is so manifestly implied, in what I am now going to quote from Reid, that I shall leave it to every reader, whether there can be any doubt of the matter.

In his INQUIRY, *chap.* 6. *sec.* 8. Dr. Reid says—
" Let us suppose that the eye were so constituted,
" that the rays coming from any one point of the
" object were not, as they are in our eyes, collected
" in one part of the *retina*, but diffused over the
" whole. It is evident, to those who understand the
" structure of eye, that such an eye as we have
" supposed would show the colors of a body as our
" eyes do, but that it would neither show figure or
" position. The operation of such an eye would be
" precisely similar to that of hearing and smell: it
" would give no perception of figure or extension,
" but merely of color. Nor is the supposition we
" have made altogether imaginary: for it is nearly
" the case of most people who have cataracts,
" whose chrystalline, as Mr. Cheselden observes,
" does not altogether exclude the rays of light,
" but diffuses them over the *retina*, so that such
" persons see things as one does through a glass
" of broken jelly; they perceive the colour, but
" nothing of the figure or magnitude of objects."

After perusing this last quotation, it is material to point out that, in point of fact, we have the *Whole Theory of Reid* pent up in the case quoted by Cheselden, as it were in a fortress garrisoned

by the single fact of what was perceived by the youth *when first made to see.* If this fact can defend Reid's Theory; it is well. If not, he has nothing else left for it: For, as to all that Reid has written upon Sensations of *Touch;* it is altogether useless, and worse than useless, for this reason—namely—that, while he had confidently asserted, and asserted in utter violation of the general feeling of mankind, that our TOUCHES *are not extended,* there is NO CRUCIAL *medium of detecting the truth in the Sense of Touch,* as there is in that of *Sight,* since there never was a human being *born without the sense of Touch,* and therefore it is *impossible to prove other than by present consciousness that our very first touches* must have conveyed a feeling of extension; although persons born blind, and afterwards made to see, afford us *this crucial test of the fact* in the case of Sight. It is manifest, therefore, that the Sense of *Sight,* and the case of persons of mature age made to see who were once blind, affords an *experimentum crucis of inestimable value in the Science of Pneumatology.* And herein it must at least be admitted that Dr. Reid was bold, or, instead of bold, Dr. Reid was in a very extraordinary degree under the influence of illusion. I do not imagine that any person with an unbiased mind, however much, or little, conversant he may be in philosophical matters, can for a moment miss to perceive that, when Cheselden says of persons laboring under a cataract, that—"the shape of an object, in such case, cannot be "discerned, though the color may," he means *only*

that the shape of ANY EXTERNAL object cannot be discerned, any more than a *sound eye can discern the shape of any object seen* BEYOND AND THROUGH "*a glass of broken jelly.*" And I here confidently urge the matter, that, by stating the fact as Cheselden has done, *he never thought of denying that Sensations of Color*, in a patient having a cataract, are *spread in his mind.* As a conclusive and indisputable test of this last mentioned truth, Cheselden himself informs us that, BEFORE *his patient had learnt to* REFER *his sensations* of Colors to THINGS EXTERNAL, he thought "*all objects* "*whatever touched his eyes, (as he expressed it,) as* "*what he felt did his skin.*"

IT IS, THEREFORE, *from such cases as that quoted by Cheselden, a settled fact of induction in anatomical Science*, that patients who have been couched for cataracts, and have first begun to see in mature age, DO *feel their Sensations of Colors spread out*, that is BEFORE *it is possible* for them to have formed ANY "BIAS," or ANY REFERENCE whatever to EXTERNAL objects. And yet, we have Professor Stewart asserting, and reiterating throughout his writings the assertion, with a lofty tone of calm contempt for any contrary opinion, that it is a "BIAS *in us to* "*connect color with figure or extension.*" Here, then, as upon so many other occasions, it is impossible to refrain from protesting against such a proceeding, as being in the last degree despotic in philosophy.

But, if any thing had been wanting to render the mistake of Reid an object of the most pointed remark; let us observe that, he talks of light being

"DIFFUSED *over the retina*," *just as if Diffusion* WERE NOT *Extension*. It is, surely, an identical proposition, that, if an eye with a cataract discerns light DIFFUSED, it discerns it EXTENDED: And, therefore, all that Dr. Reid has said, about such an eye's *not discerning the figure or magnitude of any object* BEYOND it, is utterly nugatory: While his denial that Sensation of Color is extended is equally absurd, and inconsistent with his own admission. Yet Dr. Reid was so hoodwinked by prejudice, as to be utterly blind to this egregious fallacy in his proceeding. And Mr. Stewart, equally hoodwinked by the same cause, has never been able to perceive that Reid labored under any such illusion. Is it possible that the Science of Pneumatology could ever be expected to advance under such auspices as these? Or, can it require any other than such an exposition, as that now afforded, to give an entire new turn to speculation on the subject. (See Note D.)

In fine: It is on all occasions to be remembered, that this same attempt of Dr. Reid at inductive evidence, to prove the inextension of our sensations of Colors from the case given by Cheselden, is the ONLY EVIDENCE offered by the School of Reid in order to carry the weight of so great an enterprise. And here, also, I may appeal to any ingenuous person, whether this attempt of Reid, in his Inquiry, (eulogised as we have seen it has been by Mr. Stewart as a model of speculation in Pneumatological Science) *was, or was not, an inquiry to determine whether the mind is extended, or inextended?*

I have altogether to hope, I may now with satisfaction take leave of that Scheme which has cost so much of my attention, in the present and in former publications. And, if so, it may be safely affirmed that the NEGATIVE good effected to the subject would be very great, even if *no positive* views were to be substituted for those which have been exploded.

It remains only to impress upon the recollection of readers the consideration, that it is not the Writings of Reid, or the Writings of Stewart; (and far less is it the intentions, or yet the real attainments of these Persons, who were good and enlightened men and distinguished ornaments of their Country;) that are aimed at PRINCIPALLY OR ULTIMATELY by the objections which have been laid against the Reideian Scheme in the course of my speculations: It only so happens that the Scheme of Reid was a conspicuous and a singular attempt, made in modern times, to establish, upon the *legitimate ground or evidence of the Baconian or Inductive Logic*, the Ancient Scholastic doctrine of the SIMPLICITY, (*which means the* INEXTENSION,) of MIND. And this attempt has been uniformly opposed by me from the following considerations—namely—*First*, That it is most glaringly fallacious, and has been demonstrated to be so by the Laws of the Configuration of our Sensations: And has been farther confirmed to be so, by the foregoing exposure of mistakes, absurdities, and inconsistencies, in Reid's, and in Stewart's, own writings:

And, lastly, has been still farther confirmed, by the express concession of Mr. Stewart, in the close of his life, by his subscribing to the Lockeian position of Lord Monboddo. *Secondly.*—That if, contrary to the fact in nature, the Fallacious Assumption of the Inextension of Mind be admitted; it follows that it must be provided with a HANDMAID to minister unto it; and this HANDMAID is a MATERIAL WORLD: because inextended Minds, if all Absolute Space were filled with such, could not produce One physical action. But, the moment we admit the assumption of a Material World, Atheism has a STANCE to build its House upon: For no Sound Philosopher ever did, or can, believe in a CREATION OF SUBSTANTIAL MATTER OUT OF NOTHING; and, therefore, no sound Philosopher can avoid being an Atheist, *unless he can* DENY THE EXISTENCE OF MATTER. And, finally, the moment we have shewn philosophical ground to deny the existence of Matter, we have *annihilated the ground*—the ONLY GROUND—on which the Atheist builds his house. It is true; if we only deny the existence of Matter because it is *desirable* to do so, we shall act like children who are slaves to their biases. But if we have *legitimate philosophical reasons* for denying it; we shall, then, be less than children if we suffer it, like an incubus, to oppress the human Understanding, and blind our human prospects.

As for Dr. Reid's believing that we PERCEIVE THE MATERIAL WORLD ITSELF; and Mr. Stewart's *lending his Sanction to such a thing;* the attempt stands alone, apart from all conceits on the Subject,

ancient or modern, that were ever conjured up in any speculative mind: It is a touchstone, which must for ever form a test of the *philosophical calibre* of the Minds which could adopt it,—a calibre limited by the hand of nature, and which no labor of reading or reflection, nor yet the great advantage of conversational collision with other minds, nor any adventitious aids, could enlarge. —Such, however, we find, is the Philosophy which Professor Stewart, in his last Work, congratulates the Metaphysicians of France upon their beginning to translate and disseminate. And from this fact it may be judged, whether any opposition could be too strong, or too resolutely persevered in, to rescue those, who shall come after us, from its promulgation and its consequences.

APPENDIX.

THE recorded evidence of the change of Professor Stewart, from the doctrine of Reid that all our Ideas are inextended and that we perceive the *External World itself;* to that of Locke, that we perceive *no Objects but our own Extended Ideas of Sensation;* is of two different features: the *one only involving*, but the *other evolving* the fact. *Each of these is equally conclusive in the eye of the Philosopher:* but the latter is by far the most obviously so in that of a general reader. They are both contained in one of Mr. Stewart's Letters to me on the subject of our controversy, if such it can be called. And as this document is of very great, and in one sense inestimable value to the subject, especially since, doubtless, it is the *only evidence in existence* which bears record to the *evolving* concession; I deem it upon various accounts indispensable to furnish the following complete transcript of it. In so doing, I notice that the most essential, that is the *doctrinal* parts of this instrument are quoted in my printed Letter to Professor Stewart, prefixed to my First-Lines, published in the year 1820; and, since then, in a published Letter to him, under date April 6, 1827; besides a recitation of these same extracts by the Monthly Review, in its Number for February, 1822: And, lastly, the whole Letter has been republished, with other documents on the subject, in a recent channel to which I shall presently advert. When it is considered that no voucher of the *evolving or circumstantial* change exists except the Letter now in question, it is manifest, I could not be too cautious in showing that Mr. Stewart had much more than abundant time and opportunity to impeach the genuineness of this instrument, if that had been possible: From which fact it is to be presumed that no one will ever attempt to call it in question; although I should always hold myself willing to submit the original to any proper inspection, as I have of course already done in the case of several persons in my confidence.

"To JOHN FEARN, Esqre."

"*Kinneil-House, near Bo'-ness, N. B.*"
"*August* 31, 1820."

"Sir,

"I am just now honored with your Letter of the 24*th August*, and have to apologise for my long silence, after the repeated communications with which you have already favored me. To a stranger to my personal habits it would be useless to plead the aversion to letter-writing, which I have felt from my earliest years, and which has now become almost invincible in consequence of the indolence incident to old age. To my intimate friends it is well known, that I have some other occupations to which I am anxious to devote every moment of health and of leisure I can command. The plans which I long ago ventured to announce to the world yet remain unexecuted; and I have but little time in prospect for the accomplishment of my task.

"In the present instance, however, since you will force me to acknowledge it, I must own that I have had other reasons for my delay. You seem to complain of some injury which I have done you in the *First Part of my Dissertation*; and I can, with the most perfect sincerity declare, that to the best of my recollection, neither you, nor any of your writings once occurred to my thoughts, while I was employed in the composition of that work. You refer to something I have said about *Varieties of colour;* and call on me to 'acknowledge your priority.' The only passage I can discover, in which I have used that expression, is in pp. 100, 101, where I have mentioned as a self-evident proposition that 'if there had been no Variety in our Sen-'sations of colour, and still more, if we had no Sensation of co-'lour whatsoever, the Organ of Sight could give us no informa-'tion either with respect to figures or distances; and of conse-'quence, would be as useless to us, as if we had been afflicted, 'from the moment of our birth, with a *gutta serena*.' If this be the passage which has given you offence, I must take the liberty of observing, that I have taken no credit to myself for the *novelty* of the remark, which I have stated as a manifest

truth, and which is to be found in various books written fifty years before I ever heard of your name. I shall only mention the first volume of Lord Monboddo's *Origin and Progress of Language* where it is expressly said, that '*Colour* is the pri-' mary perception of the Sense of Seeing, and that the Others are ' only consequential.' ' Figure and magnitude' (he adds) ' are ' nothing else but colour of a certain extent, and terminated in ' a certain manner.' (V. 1ı 2. edn. p. 26. Edinb. 1774.) Should this really be the observation you allude to, (and I cannot possibly think of any other,) you have my free consent to take the credit of the discovery; nor shall I ever dispute your claims to originality. I have only to request, on the other hand, that you shall not insist on any acknowledgment on my part, that I learned it from your publications. If from this principle, which has so long remained barren in the hands of others, you have been able to deduce any important consequences, the greater is the praise due to your inventive powers, and to your philosophical sagacity.

" Before I conclude, I must beg leave to assure you that I am much less acquainted with your works than you are pleased to imagine.[1] I have spent much more of my life in thinking than in reading; and this disposition grows upon me every day as I advance in years. I was led indeed by curiosity to dip into your volume on Consciousness, where I saw evident marks of an acute and penetrating, though somewhat too Self-confident genius; but from the moment I found it stated as your serious opinion that ' the Human Mind is a flexible Spherule,' I was satisfied that your views and mine concerning the proper object of this branch of Science were so diametrically opposite, that I resolved to employ my time in what appeared to me (perhaps very erroneously) more profitable studies.—Since that period

[1] This sarcasm was equally arrogant and unprovoked: I *never imagined* what Mr. Stewart is here pleased to imagine for me. On the contrary, I impeach him, *and posterity will judge* him, for WILFULLY NOT being acquainted with what affected the Subject so seriously as the Laws of Vision, which I both " addressed" to him and sent to his address.

I do not recollect to have ever read a Single page of any one of your books; not even excepting that which you have done me the honour to address to me thro' the medium of the press.

"I have only to add, that if I have now said any thing displeasing to you, you have compelled me to do so in my own defence. I have done all I could to avoid a correspondence, which I foresaw from the beginning was more likely to widen than to heal the breach which *you conceived* to exist between us; and which, I assure you, has given me no Small concern, after the flattering accounts which I have received from Some of our common friends, of your amiable temper and character.

"Were we living in the neighbourhood of each other, I should have much pleasure in cultivating your acquaintance; and I have no doubt that we should find many Subjects for our conversation of a more agreeable nature than those which have given occasion to this letter, and on which I despair of our ever coming to a better Understanding by any argumentative discussions."

"I am, Sir, with Sincere regard,"
"Your most Obed. and faithful Servant,"
"DUGALD STEWART."

With respect to the tenor of the Letter, here transcribed; without for a moment overlooking the parts of it that bespeak courtesy, I am under the necessity, in the first place, to observe, that Mr. Stewart's affecting to talk of his *aversion to letter-writing;*—of his being *forced in his own defence;*—of *my being offended,*—and of his *not acknowledging that he took the matter in dispute from my writings;*—is one tissue of irrelevance to the subject, and was trifling with the pressure of the case. Various voices have agreed, past dispute, that he had published a matter in which I had been before him. And he was *never asked, nor even secretly wished,* by me to own that he took the matter from my writings: He was only called upon, in mere justice, to own, *in some public channel,* that I WAS BEFORE him in the thing. And he was so requested, *never in any tone of offended* feeling; but was solely solicited to remove

from me *both a pressure and an odium*, which his publication of the thing unacknowledged had brought upon me. And, lastly, as for his time; *five minutes* of it would have sufficed to restore to me my right, while he was publishing the *Second Part of his Dissertation in the* BRITANNICA, as I suggested to him: and he well knew that any acknowledgement, which he made to me in a *manuscript letter* would hardly find circulation in any vehicle at all adequate to the purpose.[1] To sum up this consideration; his Letter, now quoted, unequivocally evinces that none of my previous applications to him were of a tenor to *stand in the way* of his doing what was required. And the

[1] The assumed tenor of excuse in Mr. Stewart's Letter has, in one instance, led to a prejudicial consequence. A writer of some remarks on the "*Parriana*" in the TIMES Newspaper, —a Channel to which I had on a prior occasion been indebted for some handsome expressions in its observations on the "*Bi-*" "*bliotheca* Parriana,"—has imputed to me "an actual cor-" respondence with Dr. Parr, and an attempted correspondence "with Professor Stewart." Upon looking over Mr. Stewart's Letter, for the present purpose, it has struck me that the writer in question may have been led into the mistake by the passage in that Letter which expresses an endeavour "*to avoid a corres-*" "*pondence*" *on the subject.* I trust it is unnecessary for me, for the sake of those who know me, to say that I *never attempted a correspondence* with Mr. Stewart in the sense imputed to me by the writer in the Times. But, considering the very wide circulation and great respectability of that Journal, it is indispensable that I should correct, to the Public, a mistake which reflects, not upon my pretensions as a writer, but on my sense of propriety. And I think it would be only uniform, with its usual character, in the Times itself to remove the untoward impression. As for Mr. Stewart's mention of his having done all he could to avoid a correspondence on the subject; I must do myself the justice to say, that he might, with quite as much gravity, have talked of a desire to avoid a correspondence with any man who had only sued him justly for a debt of a thousand pounds.

handsome sentiments which he has in this Letter expressed toward me as a man, altogether prove that the only thing which prevented his doing me justice as a philosopher was the fact, that he had placed himself upon ground which he was staked if possible to defend. In adverting to this; I, on my own part, unfeignedly deplore that his act had bound me to the necessity of declining his courtesy, and even his kindness, in offering me the favor of his friendly converse,—a proffer which I should have deemed highly honorable to me as a private individual, but which was out of the question when made under the implied condition that I would forego the public object of my life.

But the momentous and primary consideration, on the *present* occasion, is the fact of Mr. Stewart's having, under the pressure of the issue, *identified himself with the doctrine of Lord Monboddo, by throwing himself into the redoubt of his Lordship's Lockeian position.* That Professor Stewart did this without at the moment reflecting on the ruin it brought upon the Reideian Theory, and also upon his own consistency, I suppose no one will ever deny. But the general tenor of his Letter proves, at least, that he was fully in the possession of his faculties when he wrote it; and that his eyes were completely open to the truth of the Lockeian doctrine to which he thus subscribed. Beyond a doubt, therefore, the subject may be congratulated on the event, from the influence it cannot fail to have on the minds of English readers. To prevent the matter from being mistaken, however, or by any means misapplied, I need only observe the manifest fact, that Mr. Stewart quotes the position of Lord Monboddo *as a proof of the truth of his own assertion that he "had taken no credit to himself for "the* NOVELTY *of the remark:"* which, in other words, means Mr. Stewart's sense, at the moment of his quoting, that *his own position* concerning "A VARIETY OF COLORS," and *Lord Monboddo's position of* EXTENDED AND TERMINATED COLOR, IS IN SUBSTANCE ONE SAME POSITION, that is—THAT THE ONE IS RESOLVABLE INTO THE OTHER. And to confirm this it is most certain, and manifest to any one in the subject, that the *former* IS resolvable into the *latter*. Were

it possible for dulness itself, or for any other cause, to lead to a misinterpretation of this result; it would be sufficient to urge that Mr. Stewart could never quote what *he viewed* as being a FALSE position of Lord Monboddo, as his *antecedent, or authority*, for a TRUE position asserted by himself. I have deemed it necessary to be thus guarded in the matter; not that any attempt *has* been made to deny the identification; but only because of the great desire there must naturally be to deny it were there a possible opening for the attempt,—a resort which could not be blamed were it practicable.

Here I remark that, if not adverted to, it might be thought, by some, that the identification of positions, now proved, at *least* bears out Mr. Stewart in his attempt to show that Lord Monboddo had the priority to me in the *generic position that a* VARIETY OF COLORS *is necessary for a perception of* VISIBLE OUTLINE OR FIGURE. On this account, I refer to my other statements of the Subject, to show that Lord Monboddo's position amounted to no more than Berkeley, and Locke, and even Aristotle, knew before him: and yet, not one of these, nor any other author whom Professor Stewart could cite, in the least degree suspected that a VARIETY OF COLORS is the fact which INVOLVES THE RATIONALE OR MANNER in which *color* IS *terminated.* In the present instance, I have only room to cite the recent mention which has been made of the matter in the *Monthly Review for September*, 1828, *in the close of its observations on the Parriana:*—"We cannot help "saying, that the treatment he experienced from Mr. Stew- "art, as here detailed, reflects no honor on the memory of that "distinguished writer. His claim to originality, in regard to "the particular position which Mr. Stewart affected to con- "sider as having so little merit, in point either of novelty or im- "portance, was long ago maintained in this Journal, and is put "beyond the reach of controversy by the statements here pub- "lished." Such are the sentiments in a publication of whose support I confess myself proud, because I feel that no under motive, or partiality, will be imputed to it; and because if, as I suppose, it is one same authority, it has *evinced its competency to the Subject* in its former remarks on the First Lines. I deem

it of value, and on the present occasion of consequence, to add that, among its last observations, which are indeed highly gratifying to me, it has mentioned the past want of general attention to my writings on the subject as being " any " thing but creditable to the taste and discrimination of my " countrymen." I thank this honorable Critic, for such decided aid. And, if my writings be found to bear out his opinion, the liberal part of our countrymen will admit the plea of a generous advocate, in a cause for the public good; and all, that was desired, may be effected.

But, over and above the foregoing conclusive reasons; it is impressive to add that Mr. Stewart, when urged on the subject, did *not deny* the identification of himself with Lord Monboddo's position, which manifestly was no other than a *virtual* identification with the *Laws of Vision*. In one of those *autograph* " *repeated communications,* with which" (he says) " I " favored him" (under date November 28th, 1818,) I expressed myself as follows. And, in case any person should suppose that Mr. Stewart was not solicited with a sufficient observance of all the respect which his eminence could claim, the following specimen will afford satisfaction.—" With regard " to the merits of the Laws of Vision themselves; should Pro- " fessor Stewart do me the honor to point out any specific ob- " jection, it will be received by me with great and un- " feigned respect, and certainly not in a controversial spirit. " But, at present, it is impossible for me to doubt that he has, " *in effect,* identified himself with *the whole four Laws;* inso- " much, that I am strongly encouraged to hope that his very " distinguished sanction will come forth, to accelerate the gene- " ral reception of these laws and the consequences which hang " upon them."—One should have thought that such language, as *this,* might have sufficed the most inordinate assumption of intellectual superiority, and have procured a gracious and a *candid* answer. But What was the result? It was this:— Mr. Stewart, in his last Letter, (already quoted;) while it is plain he *felt himself unable to deny the identification;* and while his eyes were then, perhaps for the first time, completely open to the situation in which it placed both Dr. Reid and

himself as Philosophers; yielded himself up to take refuge in the ungracious declaration that, "*he did not recollect to have ever "read a single page of any one of my books,*"[1] after the Essay on Consciousness. Can it be imagined that my utmost ambition could have desired a more gratifying issue, of this cause, than that Mr. Stewart should have been fain to adopt *such* a mode of defence? Can I fail in calculating upon that RE-UNION of opinion, which must follow from having brought Professor Stewart to consign, by his own conspicuous act, the Reideian Theory to the third heaven of speculative illusions?—At any rate; I appeal the Subject to the intellectual portion of my countrymen now living: and leave with them that responsibility which must attach to any continued want of affording what is due to its advancement.

It remains to notice, here, as concerning the issue with Mr. Stewart altogether, that the very learned Editor of "Parriana" having written to me, to request that I would furnish him, (with a view to their publication,) any letters I had of the late venerable Dr. Parr; and, it being understood, generally, that this gentleman had been intended by Dr. Parr to be his Biographer; I thought I could not do better, as a tribute of respect and gratitude to the deceased, than supply any such; while, also, the publication of these letters was very material to the elucidation of the controversy. I therefore transmitted to Mr. Barker those letters of Dr. Parr to me which are published in his book: And he, upon observing the tenor of their contents, very handsomely offered to insert also, in his work, my correspondence with Professor Stewart, and other matters relevant. In the result, he has executed this intention in a very full and effective manner; for which I consider both myself and the

[1] They were *not* "*books,*" *nor bulky;* but were short tracts, of perhaps from thirty to fifty pages, which could take up but a few minutes to apprehend the truths they contain. Could it be any thing less than a resolve *concentrated by the utmost pressure*, that had force to resist the *curiosity* which must have prompted *any* philosopher to look into them?

Subject materially indebted to him. The account, which has thus been placed before the Public, is far more particular and documentary than that which is prefixed to my First Lines: And it forms a history of the Subject, which will be matter of interesting and valuable future reference. Its value, indeed, has been acknowledged by more than one Critic of the Parriana. And, in the insertion of it, Mr. Barker could have had no motive, but a desire for the advancement of truth. As for any private advantage; it was out of the question, as I have not a doubt that he might have had abundant materials, of a very different and more popular complexion, to fill up his volume, had that been his object. I owe this unasked explanation, to a gentleman who has spontaneously evinced his feeling that I had justice on my side; and who has certainly been upright in affording his aid toward my obtaining it, at the same time that he was not uninfluenced by the consideration, that the papers in question have *another* value, in being more important to science, than they are to individual right.

In mentioning the name of Dr. Parr, on the present occasion, I cannot withhold my tribute of veneration of what I consider as the first of all his qualities—that of an upright and generous spirit. His admiration of Professor Stewart was great, and avowed. And Mr. Stewart, as may be seen from the correspondence published in the Works of Dr. Parr, had lavished on him compliment, even to adulation. And yet, not all this could induce Dr. Parr to withhold the generous part he has taken in the matter between Mr. Stewart and myself. It may be judged what must have been the impression made on Dr. Parr's mind by the proceeding of Mr. Stewart, when he has expressed himself as follows in a Letter to me, (published in the Parriana,) of which he knew I must, if requisite, avail myself:—"If Stewart deals out a scanty measure of justice to "you, leave him thus far to the disapprobation of wise and good men." Upon this good advice I have here only to say, that Mr. Stewart lived, and died, *without* dealing out the most scanty measure of justice, either to me or to the subject.

NOTES.

Note A, page 30.

Professor Stewart has complained, in his DISSERTATION, that he had "conversed with many, with whom he found it "quite in vain to argue, and this not from any defect in their "reasoning powers," on the fact of *Colors being in their Minds.* But this, I think, is not surprising when we consider *how inveterate* the prejudice is in all mankind, from early life, to believe that *color is a skin adhering to the outsides of external bodies.* I shall resume this consideration, in the Section of our *Thinking in Colors.*

Note on Dr. Parr's Opinion.—See page 94.

The words of Dr. Parr, in his Letter on the Subject, are these:—"And though my judgment does not go along with "you, yet my affections sympathise with you, and my imagi- "nation at least is strongly acted upon by your representation "of the Deity, as visible in his works." Upon this opinion I have remarked, in the Parriana, that, *after admitting* (as he *had done*) the *premises*—namely—the Laws of Vision,—it *could* not have been his *unbiased judgment*, but only his *judgment under a bias of his imagination*, that *could* have borne him out in a denial of the *conclusion deduced by me.* But, since writing that remark, I have been sensible that there has been a mistake on BOTH sides. The correct fact is, that Dr. Parr denied my conclusion only owing to the *mistake of supposing* it to be that of our *perceiving the Ideas, or the Energies, of the* DEITY: Whereas, the conclusion so denied by him is *not mine;* but is *that of Malebranche,* and is *infinitely different* from mine. I regret that death has put it out of my power to point out this mistake to the venerable Dr. Parr; and to secure his sentiments on the actual fact of the case. But, for the sake of the living, this explanation will, I trust, do equal justice to Dr. Parr and to the Subject. One thing at any rate is certain, namely, that Dr. Parr forms another illustrious authority, of a Churchman, in addition to those of Berkeley and Malebranche, vouching that my conclusion is altogether compatible to work with the truth of the Mosaic Scriptures.

Note on Dr. Reid's Objection, of a Double Object of Perception.—See page 98.

Dr. Reid, in his Essays on the Int. Powers, Ess. 2, chap. 9. has put in an objection against Locke's doctrine of Ideas, upon which he lays great stress,—namely—that if we perceive by means of *Ideas*, we must have a *Double Object* of perception every time we either perceive or think of any external object. The *fact*, which he has therein asserted, is true. But it presents no objection to the Subject: And one is only surprised that any Philosopher could raise an objection out of it. I have shewn at large, in the Section of our Thinking in Colors, that Every External Object is *at least a double* object, or rather is *Two Different Objects one enveloped in another.* And, besides this class of perceptions, it is a manifest truth that, in *various other ways*, we continually perceive *two, three,* or *more, objects,* one as it were *involved in or behind* another, when, at the same time, we *consider* ourselves as perceiving *only one single object:* In which processes it is farther remarkable, that the object we *consider* ourselves as perceiving is the *farthest from* our perception of the whole group. Thus, at a masquerade, we consider ourselves as perceiving a man, or a woman, and we converse with this person; *without all the while perceiving one particle of this person;* but, instead of the person, perceive *only an envelop* of dress. And, if this person's face were exposed to our view, we should *still* consider ourselves as perceiving and contemplating the *unseen* attributes that are indicated by the face. In like manner, we consider ourselves as perceiving a book, or a table, or any other piece of furniture, when we are in reality perceiving *only some covering* of it. Now, in any of all these processes there *never is any confusion, or mistake,* occasioned by either the *duplicity* or the *multiplicity* of the objects. The objection of Reid, therefore, is most nugatory and unfounded; and it cannot require farther explosion.

Note C.—On Dr. Brown's notion of Mind, page 190.

Dr. Brown has followed Locke, in so far as to deny our per-

ception of any thing external to the Mind. But he has not, so far as I at this moment recollect, advanced *any evidence* in support of Locke's Idealism; but has only taken his stand upon what existed before: And hence, his adhesion to this side of the subject could have no effect in exploding the Reideian doctrine of perception. Upon the other hand, Dr. Brown is eminently to be classed with the number of Philosophers who have commenced with immolating their reason to that Idol the SIMPLICITY OF THE MIND: And it is altogether deplorable to see the ravages of this adoption, throughout his Lectures. It was *this alone* could have put him upon the astonishing attempt to derive our notion of EXTENSION from our notion of TIME. And, what renders that attempt still more wonderful, is the fact that Dr. Brown *does not deny the reality of Space or Extension in nature, without or beyond the mind,* as Berkeley did, and as I confidently apprehend Dr. Brown's derivation of Extension bound him to do. In fact, it appears to me, past dispute, that Dr. Brown *took up One half* of the mantle of Berkeley, and *left the Other half behind.* And how he could combine the four principles—namely—that *Extension is a real* thing,—that *we perceive nothing beyond our own Ideas*—that we *perceive Extension,*—and yet that our *Ideas of Extension are* NOT REALLY EXTENDED,—is to me one of the most incomprehensible proceedings that I have met with in a mind so really acute as was that which he possessed. I have every wish to bear testimony to the merits of Dr. Brown. But I may with confidence affirm that, after he had once imprisoned his genius in the Dogma of the Simplicity of the Mind, no human acumen could save him from a succession of disasters in his course. CONTRADICTION *and* MYSTICISM are utterly inadmissible in Philosophy: *And no Philosophy can exist, which cannot be embodied in* EXAMPLES. We might, without violence to reason, listen to any Philosopher lecturing upon a SIMPLE MIND AS UNDERGOING AN INFINITE VARIETY OF MODIFICATIONS, provided his first lecture were that of DEPICTING *the Whole of Shakspeare in a mathematical point,* as one would depict a Gala, or an Opera, in little, in a scite which could contain it!

Having adverted here to the opinions of Dr. Brown; I owe it to justice to notice that of a Fair Author, whose notion of the nature of Mind appears to me to coincide with his; and to whom, indeed, I have imputed, in common with him, a *taking up one half* of the mantle of Berkeley, *and leaving the other half behind.* In the course of a reply which I have offered in the Parriana, to some remarks on my First Lines by Lady Mary Shepherd, published in the same channel, I have in one place observed, that her Ladyship "has even not "refrained from pronouncing on the '*puerility*' of Newton, in "his believing that God could have created a world other than "the present one." To this remark her Ladyship has, in some communications on the subject, objected that I have stated her assertion without a due qualification with which she had accompanied it. And I have great pleasure in embracing this occasion to acknowledge, with all due apology, the oversight: which I now correct by quoting the passage from her Ladyship's Work, ("*Essays on the Perception of the External Universe;*") which I did *not quote on the former* occasion; but only incurred, upon my very defective memory, a fault which I very rarely risk falling into.—The passage in question is as follows: —"and I cannot avoid considering Sir Isaac Newton's theory "as something puerile and unphilosophical, if it is to be under- "stood in the sense Mr. Stewart gives to it." I trust this explanation will altogether satisfy the wish of an Authoress, of whose very rare direction of mind I have already spoken with great and real admiration; although nothing can be much more opposite than our respective notions of Mind itself.

Her Ladyship's claims to great respect, on very various grounds, rendered it imperative upon me to entertain her Writings, *in the first instance.* And, indeed, I considered what I have said, in my reply to her, as being equally applicable to the opinions of Dr. Brown concerning the nature of Mind. I would therefore, if requisite, refer any reader to what I have said on the Subject in the PARRIANA, as being the ultimate remarks which I prescribed to myself to offer with regard to it in order that the matter might not possibly degenerate into controversy.

Note D, page 208.

In the Third Volume of Mr. Stewart's Elements, he adverts at large to the *different results of perception*, which followed in the case of the youth who was couched by Cheselden and the cases since described by Mr. Wardrop and Mr. Ware; the last of which cases have appeared, or have been supposed, to make against Berkeley's Theory of the *perception of* OUTNESS. The reasoning of Mr. Stewart, on this point, appears to me just, in his attributing the difference to various degrees of blindness in the different patients,—*none of whom were totally blind.* But I am rather surprised it should not have been adverted to, and admitted conclusively, that the matter in question is *not an object of inductive* science; but certainly admits of proof—*a priori*—as Berkeley had treated it. No Philosopher has ever supposed a *Sensation of Color to have Trine Dimension or Depth.* And it has been abundantly proved, in the foregoing treatise, that a *Patch of Sensations of Colors* forms a VEIL OR BLIND between the Mind and *any External Object which we are said to see.* Hence it is plain that the *term* OUTNESS, when applied to Any Object, is equivalent to, or is only another way of expressing, the *term* TRINE DIMENSION OR DEPTH: and, therefore, if Sensation of Color itself have *not Trine Dimension*, it is *impossible* that the Mind can discern *Outness immediately*, as it discerns *Color in its two Superficial* Dimensions. This result is no less than demonstration itself: And it follows, that *any result of experiment*, which *appears* to differ from it, must be attributed to extrinsic accidental causes, whether apparent or not: *Nor, indeed, can experiment ever give a voice in the matter*, until some patient be restored to sight who *had never in the least degree* felt *any dawn of Sensation of color;* which appears to be yet a desideratum.

I deem it of importance to notice here, that, in Mr. Ware's statement, as quoted by Mr. Stewart, he says—'I am aware, 'that these observations not only differ from those related of 'Mr. Cheselden's patient, but appear, *on the first statement*, 'to oppose a principle in Optics, *which I believe is commonly*

'*and justly admitted*, that the senses of sight and feeling have 'no other connexion but that which is formed by experience.' Upon this passage, I observe that the assertion of a *specific difference* between Ideas of Touch and Ideas of Color is a doctrine of Berkeley, which has been given into since his time; but (I deem) most fallaciously so; and most mischievously to the Nature and Doctrine of the Mind. In this conclusion I am borne out even by Dr. Reid; whom I have quoted to this effect in the body of the work. And I shall here merely suggest the following experiment, in support of it. As preparatory to this, I remark that Mr. Molineaux and Mr. Locke fell into a mistake, in chusing a *Cube* and a *Sphere* for the Subjects of their problem; *since no Thing of trine dimension is an immediate object of sight.* The Objects chosen ought to have been a *Square* and a *Circle.* If, then, we suppose a person, on first being made to see, were to be shown a Square, or a Circle, of *any small size*, such as is *perceived without any motion of the eye;* I conceive, he would in this case be confused, and at a loss to say of what figure the object is: and this would happen owing to a *stupor*, which arises in the Mind upon the *very first* proposal of many *self-evident truths.* But, in order to solve the problem in question, let the patient to be endowed with sight by means of an operation be couched in the middle of a *square room;* and, after receiving his sight, let it be demanded of him *of what shape is the ceiling* of the room: In which case, he would be *under a necessity* to *direct his eyes, by a gradual motion, along the cornice*, in the very same manner that he had, (before he received his sight,) been *used to move his hand over any large square:* And I predict, with confidence, he would infallibly pronounce that the ceiling is a *four sided figure.* It is indisputable that, in the perception of *all very large and near* visible figures, such as the side of a room in which we are, the EYE *operates precisely as a Hand:* And, in fact, the Great Giver of the Eye has therein given to us a Hand, so adapted as to make use of *rays of light as a rod, or a bundle of rods;* by means of which we HANDLE *distant objects*, that Touch could never reach. I shall only add, here, that the attempt of Berkeley to introduce *two different kinds* of figures—namely—

a *tangible* and a *Visible*—was equally fallacious, and prejudicial to the physiology of Mind; and was so held by Dr. Reid.

But the most important consideration, intended in the present *Note*, is to guard even the most careless reader against the mistake of supposing that the *different results of perception*, in the cases described by living eminent operators on the eye; or, yet, the observations of Mr. Stewart upon these cases; have any thing at all to do with the fact, so conclusively testified by Cheselden, that *Sensations of Colors* were perceived by his patient EXTENDED *in Two* DIMENSIONS (i. e. *in length and breadth*)—BEFORE the patient had at all *learnt to refer these Sensations*, FALLACIOUSLY, *to* OUTNESS *or* EXTERNAL SITUATIONS, as he afterwards did like all the rest of mankind, —a cheat which he *put upon himself by his associating his Sensations of Colors* with his *Experiments of Touch*. The attested fact of Cheselden's patients' perceiving *Colors and their Interlimitations extended in his Mind, as being* FIGURED OBJECTS "*touching his Eye*," (that is PRIOR to his at all conceiving OUTNESS,) has nothing whatever to do with the *after* question Whether any patient, similarly situated, can conceive OUTNESS in the *same primary manner*, or *on the same primary occasion*. Mr. Stewart, indeed, has not asserted that it has: But yet, the precaution, which I now afford, may not be useless, at least to readers in ordinary: And any mistake, on this point, would be of immeasurable consequence.

A

PAPER

ON THE LOGIC OF RELATION

CONSIDERED AS A

MACHINE FOR RATIONATIVE SCIENCE.

The reason for supplying the present paper is merely accidental, and is not that of an intention to state any thing new concerning the nature of Relation itself integrally considered,—a Subject which has appropriately occupied a portion of my former publications. The fact is that, although the estimate of the Nature of Relation, which is comprised in the Analysis of the Subject laid out in my First Lines, has been assented to by several writers in very different situations, I have reason to believe that the *extent of its applicability, or bearing upon the constitutions of science in general*, has not awakened the attention of the classes whom it most concerns; and, even, that its operation in the case of *any one* Science has not been duly apprehended, except in the case of a few readers more appropriately conversant on the subject. To provide, therefore, against the contingency of this Subject's being possibly left, for an indefinite length of time, in a state equivalent to its non-existence, is the principal, or at least the proximate, object of the present paper. In

order to effect this object, the following considerations are in the first place suggested, as being preliminary to what follows.

To those who are at all conversant on General Logic it will sufficiently appear, from a due consideration of the matter, that the CATEGORY OF RELATION possesses an Office for the erecting of *Rationative* Science, correspondent to that which the Baconian Logic holds in the erection of *Inductive* Science. In addition to this; it is to be here observed, that *all sciences whatever*—the Inductive as well as the Rationative—are comprehended under the Laws of *Relation*. In other words; the Rules of the Novum Organum comprehend, and govern, only all those Sciences which consist in the Classification of *Contingent* Facts existing: Whereas, the Laws of Relation not only comprehend and govern all those Sciences which consist in the NECESSARY CONNECTIONS *between* OUR IDEAS, *and also all such connections between* EXTERNAL EXISTENCES; but, in addition to this, they do the like with regard to *All Contingent Facts, so long as such facts actually exist*, just as the Municipal Laws of any Realm comprehend and regulate *Every Alien Subject so long as that Subject actually resides therein*. From the considerations now stated it is manifest, that Each of these Two Machines for the erection of Science is a LOGIC, although each is a very different Logic from the other.

In order farther to afford a general conception of the *scope or comprehensiveness* of the Laws of Relation, in our apprehension of the things of the

Universe; it may be remarked, in the first place, that the DIFFERENT KINDS of things in existence have been, by different Philosophers, divided out into CATEGORIES OR PRIMARY CLASSES, as forming the Whole Scheme of the Objects of Science, or of the Logician. It is sufficiently known that Aristotle made the numbers of these Categories to be TEN: Of which, the reader may find a cogent account prefixed to Dr. Reid's Essays on the Intellectual Powers; and in which, he very pertinently comments upon not only these, but likewise upon the Categories of Hume, and those of Locke; the former of whom makes the proper number to be SEVEN, and the latter THREE; while there is also, as Dr. Reid justly observes, as great a discrepancy between the *natures*, as there is between the *numbers*, of these assumed Categories; and, of course, it is plain that much fallacy must be embodied in the whole conflict of these judgments of the subject.

On the other hand; I would suggest here, that the Scheme proposed by Locke approximates much more to the truth of nature, than either of the others above-mentioned. For HE makes his Three Categories to consist in SUBSTANCE,—MODE,—and RELATION. And, from the Principles of Relation which I have deduced in my Analysis, I consider it as a matter which is not likely to be denied, that all the objects of our knowledge, how diversified or infinite soever they are in their particular or individual natures, fall under ONE *of* TWO GENERIC CLASSES ONLY.—EVERY Object, or Sub-

ject, in the Universe, must either be considered *in itself insularly and absolutely*, and *then it is no part of the Universe*—that is it is *no object of Science*—because *All Science* is of Relativeness, or of Relation; —or, else, it must be considered in its CAPACITY OR OFFICE OF A RELATED SUBJECT TO SOME CORRELATED SUBJECT, and this RELATING TO Some Other Subject is, *in a Logical Sense*, an ACTING WITH that Subject. Hence it must be a self-evident truth, to those who are sufficiently in the Science, that there is not in the Whole Universe any Category of Thing, considered as an Object of either the Philosopher, the Logician, or the Grammarian, besides that of CO-AGENTS and of LOGICAL ACTIONS *existing, or assumed as existing*, between these Co-Agents. The Logical Scheme of the Universe proposed by Locke, therefore, needs *only to be simplified, by excluding his* CATEGORY OF MODES, inasmuch as *Every Mode*, as well as every *Substance*, takes ON the Logical Character or Office of a CO-AGENT, in any reasoning, or speculation whatever, which we can enter into concerning it as a part of the Universe: although a distinction between *Substance* and *Mode* may still be entertained, as a subordinate consideration, in a logical estimate of things.

In order completely to illustrate the nature of the foregoing commentary on the Scheme of the Universe proposed by Locke, I observe that what he calls, (and what are indeed in themselves —that is when viewed *insularly and absolutely, without reference to Other Substantive Things,*)—SUB-

STANCES OR SUBSTANTIVE Things TAKE ON A NEW CHARACTER *the very moment we view them with* RESPECT TO ANY OTHER THING; That is,—the moment we view them with reference to Any Other Thing, instead of being any longer viewed as being MERELY SUBSTANTIVES, THEY ARE THIS *and* SOMETHING MORE, for they are SUBSTANTIVES *considered as invested with an* ADDITIONAL *that is a* RELATIVE CHARACTER, and, here, for the sake of brevity, they may be called RELATIVES *or* RELATED SUBJECTS, *although they can never lose their Substantive* character. Every One of Locke's *Substances*, and Every One of his *Modes*, the moment it is viewed, or reasoned upon, as Associated with Any Other Substance, or Mode, is a RELATIVE according to the description now given.

As I have shewn, in my Analysis of Language, that the Philosophical Structure of Speech is *accurately the same* as the Logical Structure of the Universe; it will afford a striking illustration of the distinction here made, between SUBSTANTIVE and RELATIVE, when I repeat a suggestion which was advanced in the work just mentioned—namely—that —Any Noun Substantive, when it *stands alone*, as in a Lexicon, is *no part of language any more than a hewn Stone, in a quarry, is a part of any building which it afterwards contributes to form.* ANY NOUN, so abstracted and insular, is *Only a Mass of Lingual Material*, cut out in the quarry, to some adapted shape and size, ready to be carried to some Fabric of Language; and the moment it is placed in *Association with other Words*, and *thereby*

becomes a part of Language, it does this by *taking on an additional character* to its *Substantive* Office, that is it becomes a NOUN RELATIVE, although Grammarians, not seeing through this matter, have called it still a NOUN SUBSTANTIVE. What I now suggest must be a self-evident truth, and an Axiom in Grammar: because *Any Word whatever has no import in language, but only in its office of being related to some Other Word.*

After what has been stated in the foregoing remarks, I may perhaps, without fear of impeachment, be allowed to affirm that *the application, and the efficacy*, of the Category of Relatives and Relation, must be *as extensive, and as powerful*, as those of the Baconian Logic, not to say vastly more so. And hence it is certain that, if the Old Estimate of the Category of Relation has been profoundly erroneous, there cannot exist a doubt but much error has consequently been built up in the world instead of Logical Science.

One farther consideration remains to be noticed here, before I conclude these preliminary observations. It is well known that, according to the general opinion of Philosophers, the two Departments of Knowledge—namely—that of Physical or Inductive and that of Demonstrative Science —are *incompatible in their evidence*, and equally so in the *nature or identity of their subjects*,—because the Truths and Objects of Demonstrative Science are *assumed as being purely hypothetical and never as really existing*, whereas Inductive Science regards only *existing facts*. Against this accredited

doctrine, however, it has been proved, in the case of those Laws of Perception which I have treated under the name of the Laws of Vision, that it has been *only an erroneous and illusory view* of the Laws of Human Thought in regard to Science. It is curious to observe, (what I have remarked in the preceding treatise,) that it is shewn by these Laws of Vision, and indeed is proved by various other subjects, that NECESSITY *springs out of* CONTINGENCY, ALTHOUGH CONTINGENCY CANNOT *reciprocally spring out of* NECESSITY. Thus, While the Two Machines for the erection of Science, now under consideration, are distinct and collateral in themselves, there is a *manifest harmony* between their distinct courses of operation, and both may be made to work together for the advancement of general knowledge.

In fine: If I had not, in the outset of these observations, considered the stupendous magnitude of the Baconian Logic an Edifice to inspire well-grounded awe and diffidence in any one who should presume to place any innovation in the most degree of comparison with it, it had been but a brief and easy thing to show that the remodelling of the Category of Relation, now in question, (*always conditionally provided it shall be held valid*) is a Logical Machine of the most comprehensive nature and operation. For, in a word, I might have observed, as a self-evident truth, that the ARISTOTELIAN Scheme of Relation is a Machine of the most comprehensive and paramount kind, *since* ALL *knowledge whatever, both of Demon-*

strative and of Inductive Science, proceeds upon that Scheme, and it follows, therefore, without farther process of reasoning, that, *if the Aristotelian System be proved untenable,* then, ANY OTHER that validly takes its place must also take its office and dignity, *and must produce changes in* REPUTED OR SO-CALLED *Sciences, to an extent commensurate with the logical difference between the two schemes.* This, indeed, is not only a self-evident truth: but I apprehend that such is the existing field for its application, that it may not be too much to affirm that a *very large proportion of all the stumbling in Philosophy*—that is to say in METAPHYSICAL Science,—including *Language* and *Grammar,* has proceeded, *as an inevitable result,* from that great and fundamental error in the Scheme of Relation which has been embraced and employed, without opposition or suspicion, from the days of Aristotle to the present time. I hazard this last assertion with an eye to cases which support it, and which will appear here, or have appeared in my former publications; and, I confess, I have not the least misgiving of the warranty which these cases afford.

In my Analysis of the Subject, I noticed that there is one great department of Metaphysical Science, in which the fallacy of the Aristotelian Scheme of Relation does *not produce* error—namely—in that of Mathematics: And I therein pointed out the *reason why* it does not. The truth is that, although Mathematics is invariably called a Science of RELATION, it is not what it is called; for it is only a Science of the RELATIVENESS of *One*

quantity to *Another;* and the RELATION OR LOGICAL ACTION BETWEEN the Two Quantities is a Thing no more *integral*, or *heeded*, in the calculus, than the *Scaffolding* of a Building is made any account of as a part of the Building itself. Thus, in the algebraical formula—4=2+2—there is a RELATIVENESS *of Equality* between the Quantities on each side the sign =;—and THIS RELATIVENESS *exists because of a* LOGICAL ACTION CALLED EQUALLING; which is carried on between the Quantities. THIS LOGICAL ACTION is denoted by the sign =: But, if we want to express it properly in *words*, we say —4 EQUALS 2 plus 2. Now, the Mathematician, if asked, must admit that the sign =, or the *word* EQUALS,—is the sign of a LINK OF LOGICAL CONNECTION, which (like a fetter) *logically ties together* the Two Sides of the equation and is the FORMAL CAUSE of the One Side being a Relative to the Other Side. But, in uttering *his conclusion*, he treats this *Link* as a Builder would a *Scaffold* after his House is completed; he throws it away, unheeded, and views the quantity—4—IN ITS RELATIVENESS to the Quantity 2+2.—When, however, I say this; the strict fact is that the mathematical scaffolding is *not absolutely thrown away;* it is *only overlooked in a certain sense*—namely—in so far, that all mathematicians would agree as to the conclusion if one half of them took the Aristotelian Scheme of Relation, and the other adopted that which I insist upon.

But, when we turn from Mathematics, to other Sciences, the case becomes infinitely different. In

the Science of Language, for example, the procedure of the GRAMMARIAN, in treating of his own department, produces a very opposite result. When HE utters the expression—*Peter* STRIKES *Richard;* the *moral* and *physical action* called STRIKING is here *as principal* an Object of his Science, as the respectative *Relative States* of Peter and of Richard. Hence, if a Grammarian conform to the Old Scheme of Relation, (WHICH INCLUDES NO LINK OF CONNEXION between any two Related Subjects,) he then teaches his hearers the doctrine that the Action of Striking Richard is an Attribute of PETER. In general terms, I may remark that, according to HIS doctrine, *Every Verb* in Language is the sign of an Attribute of its NOMINATIVE. I need not enlarge, here, upon the devastation of reason, in So-called Grammar, which follows from the same cause—namely—the *sinking or not entertaining the* LOGICAL LINK between the Striker and the Stricken, *and between Every Other Agent* and its *Co-Agent,* which I call a RELATION. But I may merely observe, to the informed reader, that it must be quite as illogical, or absurd, in the case of the foregoing algebraical formula, to affirm that the sign = is an Attribute of the Quantity 4, as it is in Grammar to affirm that *Any Action,* or ANY VERB, is an Attribute of EITHER of the Subjects concerned ; while this Sign is manifestly a LOGICAL BRIDGE between the two, and is no more an attribute of EITHER than LONDON BRIDGE *is an attribute of either London* or *Southwark.* And here it is not meant to deny that there is a loose popular

sense, in which LONDON BRIDGE is an attribute of London, as when we say *London has a Bridge.* But no Grammarian attributes a *Verb* to its *Nominative* in *any thing like the same* sense as a Bridge is attributed to a Town, or to either Bank of the River over which it stands: For it is certain, in *strict logical truth,* that LONDON HAS NO BRIDGE; but *London and Southwark* have a BRIDGE BETWEEN them—*that is to say* INTERPOSED AS A THIRD OBJECT between them—which *ties* or CONNECTS them, *as Two Distinct Objects,* as a thong, or chain, connects a couple of dogs, WITHOUT binding them into *One Same* logical Object.

Now the *distinction or difference* here pointed out, between *Any Attribute of Any Thing*, and *Any* ACTION (i. e. ANY RELATION) between that Thing and Another Thing, is the VERY FOUNDATION OF GRAMMAR; *because* ACTION, considered in the sense of a LINK between Some Two Co-Agents, is the VERY ESSENCE OF THE CATEGORY OF RELATIVES AND RELATION.[1] And, from this example of the Structure of Language, a reader has some vague conception of the extent, or degree, in which the Estimate of this Category, now insisted upon, must operate in the Structure of *Other* Sciences.

[1] Besides other assents to this; in the very able and effective article on the *First Volume* of Anti-Tooke, which appears under the Head *Philology* in the CYCLOPÆDIA EDINENSIS, (the *Second* not being then published) *the writer* has entered completely into my reasoning on the Subject; and altogether agrees that so vast a difference between the Two Schemes of Relation, as is therein laid down, is fully sufficient to affect the Science of Grammar as extensively as I have asserted.

2.

After having well considered the foregoing statements, a reader will be enabled to apprehend and appreciate that scale of the Mental Faculties which I was induced to lay down in my First Lines,—a graduation which, indeed, has been assented to by the Critic of that Volume in the Monthly Review, upon the ground of Relation in question; but the cogency of which, I have reason to think, has not appeared to other readers in general.

In the Preface to the work just mentioned, I was led to remark upon the very notable discrepancy observable between the scales, respectively, of Dr. Reid and Professor Stewart on the Subject,—a discrepancy the more striking inasmuch as those two Writers are more extensively *identical* in their pneumatological opinions, than perhaps any other two upon the same subject: from whence, therefore, of itself alone, we have *internal evidence* that there *must be something wrong* in the pneumatological views of these Writers, one or both of them.

In the body of my work, I proceeded upon the conviction, that an understanding of the TRUE Structure of the Category of Relatives and Relation is a *necessary preparative* to a right understanding not only of such intellectual processes as Reasoning, Abstraction, Generalisation, &c.; which processes might otherwise appear exclusively to demand it: but necessary, also, to a right apprehension of Imagination or Conception, Memory, Perception, and, lastly, even to *Sensation itself*, especially in its

complex masses such as that of a Patch of Color. While, upon the other hand, I assumed that all men have a sufficient knowledge, from the teaching of nature alone, of the processes of Sensation, Perception, Memory, and Imagination or Conception, to enable them rightly to apprehend an analysis of Relation, when it should be placed before them.

Agreeably with this view of the Subject, I made an Analysis of the Category of Relatives and Relation, *virtually*, the PRINCIPAL feature of the work: And, in point of fact, it forms *virtually* the FIRST CHAPTER therein; although in point of Nominal Title the process of Perception gives its Name to the Chapter that precedes it. The truth is that, the process of PERCEPTION is nothing other than ONE SPECIES of the intellectual process of discerning the *Relativeness of,* and the *Relations between, what are called* OBJECTS: And my only reason for not comprehending both, under one same nominal head, was a desire to avoid confounding the different species, in the mind of a reader.

If I have been right in the view of the subject now insisted upon, it must follow that, to commence a General Treatise of the Mental Powers in the usual way, by beginning with Sensation, Perception, Memory, Imagination, &c. without previously grounding the learner in a knowledge of the nature of Relation, must prove something like as sterile and unprofitable as it would be to attempt to teach any one the principles of algebraical equations, without first instructing him in the rules of common arithmetic.

I trust it will be a convincing example of the truth of the last observation, when I appeal to that "TRANSFERENCE of the Subject of Perception, from "*Inductive* Science, of which it had always there- "tofore been considered as a part; to form a de- "partment of Science that is legitimately *Mathe- "matical or Rationative*,"—a transference which has been seized upon, with most happy discernment, by the Critic of my First Lines in the Monthly Review (*for February* 1822.;) and recognised by him with an adequate force of expression. And thus it appears in the Science of Perception, as conspicuously as it has already been shewn in that of Grammar, that an application of the TRUE Structure of the Category of Relatives and Relation, as a Machine for the erecting of Rationative Science, has produced results which never otherwise could have existed. And, unless those Principles of Grammar, and these of Perception, respectively, can be invalidated; it becomes undeniable that the Structure or Machine, which has produced these results, must be allowed to possess the office and dignity of that Aristotelian Scheme of Relation which has governed the procedure of Logicians, in all the departments of Rationative Science, from the days of the Greek Philosophers to the present hour.

After what has been said above, it hardly needs to be observed, that a commencement of a Treatise on Mind with an Analysis of Relation on the Principles of the ARISTOTELIAN Scheme could be of no advantage whatever. If, for example, Mr.

Locke had placed his copious Analysis of the Subject as his First Chapter; it could never have led him to *any other* train of speculation, *with regard to the* PERCEPTION OF EXTENDED FIGURES OR OBJECTS, than that which he has followed; and Perception *would still, according to him,* be a *mere experimental or inductive* science; without so much as a suspicion that it is a Science of RATIONALE, in being a legitimate discernment, *by an act of Judgment or Intuition,* of a RELATION OF MEETING between *Some Two Correlated Patches of Sensation of Color, or of Touch,*—a fact which, as already observed, *changes the whole nature of Perception* from that which it was ever considered as possessing; and, I may here observe, along with this changes also, in an immeasurable extent, the nature of *Pneumatological Science at large,* as has been demonstrated in the Principles of the Physiology of Mind, including those of Physical Theology, laid out in the *first* and *second* Sections of the foregoing manual.

It is impracticable, in the requisite limits of the present paper, to advert at all to OTHER departments, either of Pneumatology, or of Rationative Science in general, to which the newly-modelled Structure of Relation is applicable, *and must be applied,* in order to convert them into true Science. But it may here in fine be asked: Supposing the Principles or Scheme of the Subject, now in question, and which, I have here presumed to insist, must take the place of those of the Aristotelian Scheme, cannot be invalidated; (as the extent of

recognition already obtained for them, limited as it certainly yet is, seems to promise;) In this case, Will Professors of Mind in future continue to teach, as heretofore, that PERCEPTION is a *Mere Fact of Induction*,—a *Mere Irrationative* branch of knowledge?

Upon the other hand, I may ask; and, I trust, with a force which cannot be lost upon those who are interested in the advancement of Philosophy; DOES IT NOT transport us into a new world of Science, when, instead of the *Absolute Mysticism* of the School of Reid on the Subject; and the *Comparative* mysticism of every other Writer on Pneumatology, from Locke, nay from Aristotle and his time, down to Professor Brown, *both inclusive;* we recognise that, *what is called the* PERCEIVING OF AN OBJECT, is nothing in the world but the PERFORMING *of a Mathematical Process* upon two, or more, of *our own Mental Modifications;* which process, also, it has been shewn, is the VERY FOUNDATION OF THE WHOLE SCIENCE OF MIND?

THE END.

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